THE TECHNIQUE OF CORRELATION IN BASIC EDUCATION

BY
A. B. SOLANKI

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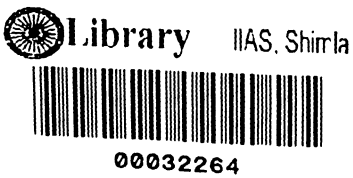

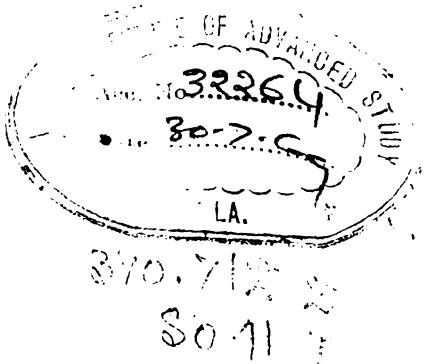

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DEDICATED

TO

THE TEACHER WHO REALIZES:

छात्रदेवान्नमस्कृत्य सर्वे स्युर्ग्रन्थवादिनः ।
तेषु तुष्टेषु तुष्टं स्यात् रुष्टं रुष्टेषु वै बृहत् ।।

रङ्ग अवधूत

"Bow down before the Divinity Incarnate
—The Students before you.
Then and then only commence teaching.
Satisfy them and the Lord is satisfied.
Displease them and be sure
The Almighty is displeased
With You."

Rang Avadhuta

PREFACE

The reader will excuse me for this rather long preface on behalf of the Publishers. It is felt necessary because a short recapitulation of the salient points in the progress and development of the idea of Basic Education is called for to draw out and put in its proper perspective the importance of this much-needed thesis on *The Technique of Correlation in Basic Education*. I thank its author for attempting it and particularly for submitting it to the Navajivan Trust for its publication.

It is by now two decades since we have been seized of this idea of national educational reconstruction. It was first presented to the country by Gandhiji in 1937. Since then it has persisted with us and during the decade when Gandhiji was with us he continually tried to elaborate it and explain to us what he exactly meant by it, in spite of his tremendous preoccupation with the fight for freedom which was at its best during these years.

Writing just a few months before he passed away in January, 1948, this was how Gandhiji described what he considered to be the fundamentals of his idea of Basic Education:

> "1. All education to be true must be self-supporting, that is to say, in the end it will pay its expenses excepting the capital which will remain intact.
>
> 2. In it the cunning of the hand will be utilized even up to the final stage; that is to say, hands of the pupils will be skilfully working at some industry for some period during the day.
>
> 3. All education must be imparted through the medium of the provincial language.

4. In this there is no room for giving sectional religious training. Fundamental universal ethics will have full scope.

5. This education, whether it is confined to children or adults, male or female, will find its way to the homes of the pupils.

6. Since millions of students receiving this education will consider themselves as of the whole of India, they must learn an inter-provincial language. This common inter-provincial speech can only be Hindustani written in *Nagari* or *Urdu* script. Therefore, pupils have to master both the scripts." (*Harijan*, 2-11-1947)

The All-India Educational Conference that met at Wardha in 1937 to consider this new idea for reconstructing education in India recorded its opinion in the form of a resolution which said that

"The Conference endorses the proposal made by Mahatma Gandhi that the process of education throughout this period (i.e. 'free and compulsory education for seven years on a nation-wide scale') should centre around some form of manual and productive work, and that all the other abilities to be developed or training to be given should, as far as possible, be integrally related to the central handicraft chosen with due regard to the environment of the child.

"The Conference expects that this system of education will be gradually able to cover the remuneration of the teachers."

This was the time (1937-1947) when there were Congress Governments managing the affairs of several provinces in the country. These took up the above suggestion and asked their educational departments to experiment how best to introduce it with a view to incorporating it in the system of education that had developed during the British rule in India.

This was also the time when the fight for India's freedom and independence was nearing its glorious culmination. I mean to suggest that both the people and the popular

Governments as also the author of this idea of Basic Education were pre-occupied with this and hence they could not do very much in regard to the experiment of Basic Education that they had undertaken in 1937-8.

By 1940 the Congress left off the reins of Government till it took them back in 1946, when the work of the experiment was again taken up in the country.

The moot point to be noted about this new idea of educational reconstruction was that it basically aimed to remove the patent drawbacks in English education that were continually, for more than half a century, the subject of bitter complaint and criticism from nationalist Indian opinion. Gandhiji's new idea was at once a bold and emphatic critique, as also a plan for reform and reorganization, of the conventional system which was universally disliked by the leaders of our people.

It will be worth while to note here that Gandhiji very clearly brought out this aspect of Basic Education and had been careful to put it as a preamble to his submission to the Wardha Educational Conference that met to consider it in 1937. He had said:

> "The present system of education does not meet the requirements of the country in any shape or form. English, having been made the medium of instruction in all the higher branches of learning, has created a permanent bar between the highly-educated few and the uneducated many. It has prevented knowledge from percolating to the masses. This excessive importance given to English has cast upon the educated class a burden which has maimed them mentally for life and made them strangers in their own land. Absence of vocational training has made the educated class almost unfit for productive work and harmed them physically. Money spent on primary education is a waste of expenditure inasmuch as what little is taught is soon forgotten and has little or no value in terms of the villages or cities. Such advantage as is gained by the existing system of education is not gained by the chief tax-payer, his children getting the least." (*Harijan*, 20-10-'37)

This basic point about the new idea was well kept before the public eye in the beginning, as can be easily gathered from the efforts of the Bombay Government in this behalf. Since 1946 when the Kher Ministry of Bombay resumed their efforts in introducing Basic Education in the State, the following points were clearly visualized as necessary reform for primary education:

1. Introducing a basic handicraft in the syllabus.

2. Devising ways for, and thereby inculcating attitude of, coming in contact with the life of the community around the school through service and by actually building up the school community life itself.

3. Introduction of teaching of Hindi from Std. V to VII.

4. Removal of English teaching from these 3 standards and beginning it from Std. VIII onwards.

5. Accepting the suggestion that the first seven years of schooling be organized as an indivisible integral unit of free and compulsory nation-wide education.

The sixth point was technical. It was to devise a suitable technique of correlation which is the theme of this thesis. This was to be done with a view to implement the main idea of Basic Education, viz., educating the child through the medium of a productive activity of a suitable handicraft.

As years went by this last point was too much emphasized and the rest of them, very important and urgent though they are, still await implementation. As the author of this thesis remarks, "This resulted in the technique not being correctly understood in all its aspects, and undue emphasis was given to the means and contents of correlation, relegating the objectives of the scheme to the background." (p. 49) The result has been that in the decade that followed Gandhiji's passing away from our midst, the fundamental idea of Basic Education got more and more confused, so much so that a recent committee

of the Central Government that was appointed to evaluate and assess the progress of the Scheme of Basic Education went to the extent of recommending that the first seven years might well have two stages, junior basic for 4 or 5 years and senior one for 3 years, and they went, to the length of suggesting that in the latter stage English might be introduced as a language of study! Bombay State has also suffered under this all-India set-back or reversion to the status quo. For example, the teaching of handicraft has been reduced almost to a laboratory experiment or almost a basic ceremonial to be followed by the conventional teaching through text-books.

One of the reasons for such a sad state of affairs that we see today was the confusion and uncertainty in the mind of those who were responsible to work the new idea, about the exact meaning and significance of Basic Education. Perhaps they lacked requisite faith and conviction to start such an educational and socio-economic revolution like the one Gandhiji aimed at through his scheme of Basic Education.

As I said above, to some the essence of the idea appeared to lie in 'correlation', which only created the further difficulty of defining exactly what correlational meant. An attempt was made in Bombay State by its educational experts to translate this idea of correlational pedagogy in terms of actual educational practice which should obtain in Basic schools. A pattern of teachers' training following the above pedagogical understanding of the idea was devised and introduced in the primary training colleges of the State. Under this pattern what was meant to be national education through the *medium* of a handicraft took the form of children's instruction through associating it with some handicraft activity. The basic conception of converting "public instruction" of children into "national education" of the people went down under the old steamroller of Public Instruction set in motion by our ex-rulers and the same old ideas continued to govern educational practice. It was like new wine in the same old bottles. The need of our

people who started their bold career of freedom and independence was to turn a new leaf in the book of our people's education and make a striking departure from the old ways which no one liked nor desired to continue. The main idea in the old ways has been to instruct, through the medium of letters or books, in three R's and such other graded informational matters that may be thought worthy of adoption from England. The language medium for this was to be English as soon as the child learnt the ABC of that language during the last 3 years of the 7 years of its course of primary schooling. Manual work and labour, under such an order, came to be looked down upon as a vulgar and unbecoming activity for those who took to such a pattern of English ecucation. Such a system of education can hardly be national in the sense that it aims to educate the whole of the people for the common fundamental or basic education for democracy and citizenship.

This book aims to present the idea of correlation as it worked out in Bombay State. Shri Solanki is well qualified to do this, as he has been associated with the working of Basic Education in the State for a fairly long time. It is published in the hope that it will help in clearing the confusion that prevails at present in regard to correlation as the method of achieving the aims and objects of Basic Education. We may, at the end, note that the views and ideas that the author presents in his thesis are his own and those who wish to study Gandhiji's views should see his writings which are made available by the Navajivan Trust in book form.

30-8-1958 M. P. Desai

Education has a great role to play in this age when the ideas of One World and One State are taking concrete shape. The advancement of science and democracy have given new vision and values to human life. Hence, education has to evolve the new man to suit not only present-day needs but also the requirements of the future. The creative and dynamic genius of Mahatma Gandhi visualized this and gave us a scheme of education—known as Basic Education, so as to reconstruct the way of life of the individual and to evolve a new social order based on love, co-operation and justice.

He gave us a sound ideological basis for this scheme of education. It is in complete harmony with modern educational trends obtaining in other parts of the world. Preoccupied as he was with many matters pertaining to the nation and humanity in general, he was unable to devote himself entirely to this scheme in order to give us a scientific teaching technique—a pedagogical method, to be used by teachers in class-room situations. As a result of this lack, teachers and educational workers misunderstood the main features of the scheme and also the pedagogical method known as the Technique of Correlation.

After Independence, our Government has accepted the scheme of basic education as a policy of national welfare and progress. As such, basic education is under the process of expansion and evolution, and it is in this context that this book tries to deal with the problems and the real position which obtains at present in basic schools with regard to this technique—vexed problem of correlated teaching. The teaching technique of correlation in basic education has been critically discussed in the light of modern educational philosophies and teaching techniques. An effort has also been made to present the authentic

views of Mahatma Gandhi about the different aspects of correlated teaching. Constructive suggestions have also been incorporated regarding: (a) Practice-teaching-cum observation work of Basic Training Institutions, (b) Organization of Basic Schools, (c) Place of the syllabus, time-table, records and assessment work in Basic Schools. In short, all the different aspects of basic education—viz. ideological, methodological, organizational and curricular, are discussed critically and in detail, with a view to helping the teacher to practise correlated teaching correctly and efficiently so as to enable him to achieve the objectives of the scheme. All this is presented critically on the basis of practical observation and study. The book, therefore, bears no mere theoretical and academic discussion, but has the background of practical study of the principles and practice of basic education. Hence, if the present work turns out to be of practical use to teachers and workers in the field of basic education, I shall feel my efforts rewarded.

Through the principles of Panchsheel and Sarvodaya, our country is trying to create and establish a new type of human relationship. Behind this, there is practical idealism, and spiritual background. Through basic education, the nation aspires to prepare the citizens of tomorrow for this new era. It is this spiritual force that inspires the individual to work for such purposes and it is in this context that I must first acknowledge with great reverence my deep feelings of gratitude to that Spiritual Force—the most revered Shri Rang Avadhuta, Maharajashri of Nareshwar—who inspired, enlightened and guided me all throughout in the fulfilment of this work.

I also take the opportunity of acknowledging my deep sense of gratitude to Prof. T. K. N. Menon, Dean of the Faculty of Education and Psychology, Maharaja Sayajirao University of Baroda and Shri J. K. Shukla, Director of the National Institute of Basic Education, Ministry of Education, Government of India, New Delhi, for their inspiring guidance and deep interest, but for which the present work would not have seen the light of the day. I cannot forget to thank Shri M. M. Shukla, Deputy Director of Education,

Bombay State, Poona and Shri I. U. Vasavada, Principal, Graduates' Basic Training Centre, Rajpipla and all those colleagues and friends who encouraged and helped me at various stages in the preparation and publication of this work. I also acknowledge my thanks to all those authors on whose works I have fully drawn for supporting my conclusions; to the Trustees of the Navajivan Trust, Ahmedabad, for bringing out this book in its present form; and to Shri T. S. Avinashilingam for writing Foreword of this book, despite heavy responsibilities.

Last but not the least, I am grateful to the authorities of the Maharaja Sayajirao University of Baroda for their kind permission for the publication of the thesis, approved for the M.Ed. degree of the university in the present form.

It will be my great pleasure to receive constructive and concrete suggestions from friends and critics so that these may be incorporated in the subsequent edition of this book.

Rajpipla,
2-3-1958

A. B. Solanki

FOREWORD

Basic education has been the declared policy of the Government in the Centre and in the States, but its progress in the last 10 years has not been very great. This has been due to certain difficulties inherent in the scheme itself. Basic education calls for much greater ability and acuteness in the teachers. It also implies an awareness of the fundamental principles of education. In many places the quality of the teachers and the quality of the training given to them has not been commensurate with the work that they have to do.

Any new method of education, to be made effective, should be accompanied with the research which will go into the difficulties of the change over from the old system to the new. It is surprising that there has been such little literature produced on basic education. There are only a few institutions which are engaged in this work. The difficulty is all the more, because the fundamentals of correlation, which is the pivot on which basic education turns, has not only been not well understood, but has been grossly misunderstood. Certain enthusiasts in basic education have done more harm to basic education than many others. I refer here to the people who think that the mere introduction of spinning in the elementary schools constitutes basic education. There were others who thought that all subjects that a child has to understand should be correlated to the basic craft of spinning, however, artificial it may be. This was never the intention either of the Father of the Nation, who founded it, or the Zakir Hussain Committee who have expounded it. As pointed out by the author of this thesis they have said:

> In order to work out an effective and natural co-ordination of the various subjects and to make the syllabus a means of adjusting the child intelligently and actively to his environments, we have chosen

three centres intrinsically inter-connected, as the foci for the curriculum, i.e. the physical environment, the social environment, and craft work, which is their natural meeting point since it utilizes the resources of the former for the purposes of the latter. . . . It is essential for all teachers and educational workers to note that we have really attempted to draft an "activity curriculum" which implies that our schools must be places of work, experimentation and discovery, not of passive absorption of information imparted at second-hand. So far as the curriculum is concerned, we have stressed this principle by advocating that all teaching should be carried on through concrete life-situations relating to craft or to social and physical environment, so that whatever the child learns is assimilated into his growing activity.

No detailed surveys have been made as to whether basic education is really run on those lines. There is reason to believe that the generality of basic schools do not come up to our expectations. Till now, not much research has been undertaken and no publication has been produced on this very important matter of correlation. The possibilities of the craft for purposes of instruction should be investigated with reference to each grade and each area, so that the intelligent teacher may make use of them. The artificiality in the process of correlation should give place to a naturalness of teaching. The fad that everything should be correlated to a basic craft should go and instead, an enlightened form of teaching, in which the children will be active and joyful and at the same time have meaningful understanding of their activities, should become prevalent.

Shri A. B. Solanki, B.A., M.Ed., has done signal service by his book on the technique of correlation in basic education. This is a thesis submitted by him for the M.Ed. degree of the M. S. University of Baroda. I have been interested to go through many portions of this thesis. What is wanted today is to make the sponsors and teachers of basic education think on these problems and I hope this book will succeed in that objective.

I also hope that this will be the beginning of a series of investigations into the various aspects of basic education.

The National Basic Education Centre established by the Government of India recently should, in co-operation with the various Teachers' Training Colleges, undertake this work, so that not only are the false ideas on basic education disabused, but also that the teachers are given help and understanding through brochures and guide-books which will actively help them in their class-work. If basic education is to serve the needs of the nation in all its aspects, we should take care constantly to explore the present and future needs of our national life, and the programme of basic education should include plans to meet the conditions of today and tomorrow of the villages and towns and men and women in various positions in life. In doing so, flexibility and freedom should be given to individual institutions to work out the details suitable to the people and the place in which they are situated.

I must, in conclusion, congratulate Shri A. B. Solanki on this thesis, and I am glad that the Navajivan Publishing House, Ahmedabad, are coming forward to publish it.

T. S. Avinashilingam

Shri Ramakrishna Mission Vidyalaya,
Coimbatore District,
19th February, 1958

CONTENTS

THE TECHNIQUE OF CORRELATION
IN
BASIC EDUCATION

CHAPTER I

THE OBJECT AND SCOPE OF THE BOOK

Introduction

The new educational ideals and procedures sponsored by Mahatma Gandhi have come to be collectively known as Nai Talim or New Education, which is regarded as a life-long process intended to draw out, in full measure, all the latent powers and capacities of human beings as members of a truly civilized social group.

Basic education with which the present study is concerned is often wrongly equated with the wider concept of Nai Talim. For the purposes of the present study, the term 'basic education' is used to connote 'a period of universal and compulsory training of children between the ages of seven and fourteen.' It is a stage—of vital importance—in a comprehensive and more ambitious programme of Nai Talim.

The Hindustani Talimi Sangh, Sevagram, describes the aim of basic education in the following words:

> The objectives of Basic Education can be summarized as a twofold aim, each part of which is integrally bound up with the other:
>
> 1. All boys and girls in India should grow up as citizens of a new social order, based on co-operative work as envisaged by Nai Talim, and with an understanding of their rights, responsibilities and obligations in such a society.
>
> 2. Every individual child should have full opportunity for the balanced and harmonious development of all his faculties, and should acquire the capacity for self-reliance in every aspect of a clean, healthy and cultured life, together with an understanding of the social and moral implications of such a life.[1]

There cannot be two opinions regarding the aims and objectives of basic education as these are accepted now in

[1] H. T. S.: *Basic National Education* (Complete Syllabus for Grades I to VIII), p. 3

all the progressive systems of education. However, the pedagogical method of basic education, known as the Technique of Correlation, has challenged the traditional class-room methods and raised doubts and scepticism even in the minds of prominent educationists. To young children, bits of information were imparted in a traditional school through words, and that too, by methods for which very little psychological justification could be given. The technique of correlated teaching makes manual activity and craft-work the centre of the child's learning. It is through this medium that the child acquires and assimilates the relevant knowledge of correlated subjects.

The approach through the technique of correlation is fundamentally psychological, but it makes the teacher's task much more difficult. Hence, even today nobody is quite clear regarding the implications of this technique and its actual practice in handling it in a proper manner in class-room situations and in dealing with the various activities of the basic school. It is because of this that educationists who agree on the soundness of the principles of basic education have expressed their scepticism regarding the actual practice of correlated teaching. It has been found, during the course of its experiment, that the technique of correlation has been understood in various ways and this has given rise to certain anomalies, misconceptions and misunderstandings about the use of this technique.

The Object of This Study

The aim of this study is to analyse the real position obtaining at present with regard to the practice of the technique of correlated teaching in Basic Schools, to enumerate the several misconceptions regarding this technique, to analyse the causes and suggest remedies wherever possible. An attempt is also made in this study to clarify Gandhiji's ideas on correlation as also on the process, the medium and the types of correlation for the adoption of the right concept of correlation. The psychological and educational justifications of the technique of correlation have been discussed with a view to understanding its right significance as a teaching technique. A few suggestions and

hints are also offered regarding the various stages of correlated teaching, the problem of curriculum, time-table, and assessment-work, in order to clarify the methodological aspects of the technique of correlation.

The Scope and Utility of the Book

It is hoped that this work will help practising teachers to understand the real meaning and significance of the technique of correlation. It will be seen that correlation in actual practice need not be difficult, if the teachers use it with proper understanding. It will also save the technique from becoming artificial. It is hoped that several confusions, misconceptions and misunderstandings which have gathered round this technique will die down, and, as a result, it will help us to formulate a right attitude towards its knowledge and its effective communication.

Techniques of teaching are mostly governed by underlying educational philosophies. The ideals and aims of education are shaped by certain convictions. A technique or a process or a method employed for the realization of these aims and ideals, if properly understood and successfully implemented, helps to strengthen convictions. It is the hope of the writer that this work will remove several misconceptions regarding this technique and thus help the practising teacher to strengthen his conviction in the ideology and practice of basic education.

CHAPTER II

EDUCATIONAL PHILOSOPHIES AND THEIR IMPLICATIONS

Effects of Various Educational Philosophies on Teaching Techniques

Techniques of teaching are governed by the ends and ideals in view. The method of teaching is thus directed by the educational philosophy governing these aims and ideals. When these two are separated, instruction and learning become formal, mechanical and constrained. There are various systems of educational philosophies with characteristically different conceptions. We shall take up the main

philosophies, namely, idealism, naturalism and pragmatism and discuss how educational methods have been shaped according to the acceptance of each of these philosophical systems.

Idealism

There are many facets of idealism. But the fundamental proposition of idealism is that the mental or spiritual is more real or that it is more important than the material. Idealism has been defended by all those who have opposed materialism and its implications. All idealists since Socrates have considered man himself more important than external nature. The idealist's position can be summed up by saying that reality is to be found in man's mind rather than his external nature. It postulates the existence of the universal mind. According to idealism, human personality is of supreme value and man's spiritual nature is the very essence of his being.

Idealism in education has contributed more to the aims and objectives of education than to its methods. The aim of education according to idealism is

> the exaltation of personality or self-realization, making the actual or real the highest potentiality of the self. . . . The aim is to enable each one to become his highest, truest self.[1]

Idealists are of the view that culture, art, morality and religion lead us to a correct understanding of reality and, therefore, all these must find a central place in education. In the educative process, it is the function of the educator to assist the educable to develop his potentialities, and thus help him towards self-realization and the greatest possible perfection. In the educative process, according to idealism, the goal is that both the educator and the educable achieve self-realization by interaction with each other. Rusk has pointed out:

> Man's higher or spiritual nature is essentially social and the social is an expression of man's rational or spiritual—hence universal—nature.[2]

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[1] Rose: *Groundwork of Educational Theory*, p. 115

[2] Rusk: *The Philosophical Basis of Education*, p. 43

The individual can realize his full potentiality and achieve perfection only as a member of the human family. Idealism thus emphasizes the social concept of education. According to idealism, truth is universal, eternal and unchanging. The same is true of the other concepts of goodness and beauty. The search for these spiritual values helps the individual to achieve harmony with the soul of the universe. The function of education is to aid us in our exploration of these universal values and thus develop a harmoniously balanced personality. The educator can help his pupils towards this aim by adopting such methods and processes as would regard the educable not as

a particular and exclusively individual being but as a being in whom a new universal life seems to emerge.[3]

From this, it follows that idealism emphasizes individuality and freedom in education. Learning, according to this, consists in making explicit what formerly was implicit in the child. Education of the senses and particularly physical education, though not altogether omitted, is relegated to a lower position in the programme for the school. Truth and goodness and such essential value of life serve as goals to which the child's learning must be led. The techniques of teaching followed by the idealist teachers are devised to make education religious, moral, intellectual and aesthetic. Plato, the prince among educational idealists, declared that training "which leads you always to hate what you ought to hate, and love what you ought to love", is rightly called education.

School is thus considered "an idealized epitome or model of the world, not merely the world of ordinary affairs, but the whole of humanity, body and soul, past, present and future."

The idealist technique believes in education as preparation for something beyond the school. The child's activity is not considered as wholly an end in itself. To explain the method of approach according to idealism, the following quotation will be helpful:

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[3] Eucken: *Life's Basis and Life's Ideal*, p. 343

Perhaps the clearest answer of idealism to the question of the educator's function is contained in Froebel's familiar metaphor of the kindergarten. The school is a garden, the educand a tender plant, and the educator the careful gardener. Now, of course, a plant will grow and achieve its own proper form unaided. But while each plant must develop according to the laws of its own nature, while it is impossible, for example, for a cabbage to develop into a rose, there is yet room for a gardener. The good gardener, by his art, sees to it that both his cabbage and his roses achieve the finest form possible. His efforts produce a finer result than would be achieved by the plant without him, yet, it is in the nature of the plant to achieve that result under suitable conditions. The naturalist may be content with briars but the idealist wants fine roses. So the educator by his efforts assists the educand, who is developing according to the laws of nature, to attain levels that would otherwise be denied him.[4]

The idealist teacher's attitude towards his pupils, his choice of teaching method, his approach to various subjects and organization of the school environment are determined by the idealistic aims of education as discussed above. In an idealistic school, demonstration, exhortation, teacher's active domination and adoption of inspirational methods, are some of the factors that govern the technique of teaching.

Naturalism

All the recent advances in educational method have come from naturalism. Naturalism gives us those modern aspects of teaching techniques which are based on facts of child's nature.

There are many phases of naturalism as philosophy, and the educational trends originating from these are also varied. The naturalistic conception of education is summed up in the term "Paido-centricism" or "child-centredness". It emphasizes the nature of the child which is believed to be good. The child is described by Wordsworth as a being who comes from heaven "trailing clouds of glory".

Thus education "finds its purpose, its process and its means wholly within the child life and the child

[4] Ross: *Groundwork of Educational Theory*, p. 121

experience". The naturalistic teacher is interested in the child as he is rather than as he will be. There is also emphasis on the belief that child's nature is dynamic and not static. The naturalistic teacher, therefore, bases his teaching technique on the principles of child psychology. It is true education where the teacher, with a minimum of guidance, allows the nature, powers and inclinations of the child to develop freely. To the naturalistic teacher, education is the fostering of the natural development of the child. The method of teaching consists in manipulating the actual life and experiences of the educand. The child is allowed the freedom to take up such activities as would satisfy his natural interests. All artificial and unnatural class methods, the rigidity of time-tables and old ideas of discipline have no value in this system of education. The teacher assumes the role of an observer or a director who does not deliberately attempt to teach but who helps the child to learn. He has to fashion his technique in such a way as to allow free development of interest and motives of pupils. He is considered

> a setter of the stage, a supplier of materials and opportunities, a provider of an ideal environment, a creator of conditions under which natural development takes place.[5]

Thus it will be seen that according to naturalistic education the teacher, the school, the text-books, and the subjects of study are all relegated to the background. The child assumes the most important and central place in the scheme of things.

The naturalistic school has given rise to the various aspects of the 'new' teaching and the 'new' education. These are summed up in the method called the Play-way. The Dalton Plan, the Heuristic Method and all those other methods which emphasize the direct experience of things and of social life, are the various forms in which the principles of play-way and creative education, which are essentially naturalistic, are emphasized. The teaching techniques in these various methods lay less

[5] Ross: *Groundwork of Educational Theory*, p. 95

stress on teacher's verbal exposition while laying great stress on ensuring actual learning experiences of the pupil. The various subjects are taught, not through books, but by experiencing the facts as far as practicable. "Things rather than words" is the guiding maxim of the naturalistic teacher. Giving examples of the method by which the naturalistic teacher teaches various subjects, Ross states:

> Science should not be taught from Readers, or by 'chalk and talk' lessons; it should rather be learned by the pupil through his own work in the laboratory or, wherever possible, through a direct study of natural phenomena, outside the school altogether. Geometry should not be taught by arguments and problems in text-books, however, lucidly explained, as learned in its original sense of 'earth-measurement' by means of surveying the playground or school field, finding the height of the school, finding the breadth of a river and other practical exercises mensuration. The methods of the Scout movement are commended, and the phrase 'boy-scout geometry' has been coined. Geography should be learned in school-journeys and actual excursions, rather than taught from books and maps. In short, the naturalist-educator rightly thinks less of his own exposition, much more of the learning experience of the pupil.
>
> We may also note the stress laid on the value of direct experience of social life. The rights and duties of citizens are learned not through talk, but through the organization of the school as a free, natural society, where the contribution of each is welcomed, where each learns to be leader in something and one of the led in others. The old authoritarian methods are abolished and self-government is the order of the day.[6]

It will be seen from the above discussion that the techniques of teaching, according to naturalism, are governed by such factors as, present experience, concretization of learning, 'follow child's nature and interest', spontaneity and development of self-expression.

Pragmatism

As contrasted with the above two philosophies, pragmatism denies any doctrine of fixed eternal values. Being

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[6] Ross: *Groundwork of Educational Theory*, pp. 100, 101

essentially a humanistic philosophy, it maintains that man creates his own values in the course of activity. It emphasizes, creative powers and functional activities of the human mind. The main task of the pragmatist teacher is to put his pupils into a position that would help him to develop values for himself. All activities are to be pursued with reference to human needs. According to Ross,

> the pragmatist regards the child as a potential creator of values in a given environment; for him, therefore, the data of education are the child and his physical and social environment, the interaction between the two constituting the child's experience. Pragmatism in education aligns itself with naturalism in starting with the child as he is; but, perhaps more consciously and deliberately than naturalism, it seeks to modify the original nature of the child by providing him with a helpful type of experience, particularly that of a social character, in which he has direct participation. It is the child's nature to experiment with life, and he is encouraged to do this, to contrive new responses to deal with the new situations of which his educator sees that he has a plentiful supply. But since life itself is experimental, there is no definite goal towards which the child must advance. Any attempt on the part of the educator to prescribe specific goals or to decide the child's purposes for him stultifies true education.[7]

Since pragmatism emphasizes theory underlying successful practice, it affords more help in the methods of education rather than in its aims. The pragmatic method consists in the satisfaction of needs, desires, purposes and interests of the child in his environment. The teacher's task is to provide the child with a helpful type of experience which is social in nature and affords ample opportunities to the child for direct participation. The techniques of teaching are such as would cultivate a dynamic and adaptable mind and which would help the child to develop his individuality fully in social medium. It detests all traditional methods, ready-made knowledge, the notion of authority, bookishness and passive learning. To the pragmatist teacher,

> education is not so much teaching the child things he ought to know as encouraging him to learn for himself through experimental, creative

[7] Ross: *Groundwork of Educational Theory*, pp. 137, 138

activity. True knowledge is not the acquiring of a dead culture, particularly from books; it is rather the power to do the right thing in a given situation. Pragmatism always tends to stress action rather than reflection; it countenances no divorce between theory and practice.[8]

The teacher's method and technique of teaching are governed by the maxim "learning by doing". All that develops the problem-solving attitude of mind of the child, his initiative and self-reliance, helps in formulating the pragmatic method of teaching. The techniques of teaching originate from the belief that there cannot be any watertight compartments between one subject and another and that knowledge and information are quite different:

> For the pragmatist, knowledge is something which is wrought out in action. Before it is used, it is merely information. Information becomes knowledge when it is judged to be relevant to the solution of a particular problem, and that judgment is tested in the crucible of experience. It is for reason such as these that the progressive educator tends to distinguish between the curriculum drawn up in advance and the curriculum, which the child actually learns in action. For him, knowledge does not antedate learning but is forged as the pupil and teacher adapt means to ends as their project develops.[9]

Both in the construction of the curriculum and methods of teaching, interdependence of the various aspects of the child's learning is emphasized. The unity of the knowledge and skills will be achieved through the organization of the child's purposive activity and the manipulation of his life and experience in general. The teaching technique, according to the pragmatist, thus emphasizes the integration of the learning process. Project method is the outcome of educational practice according to pragmatism. Learning, knowledge, skills, ideas and ideals are acquired by the pupil in the process of experiencing a problem and successfully solving it. The teacher's function is to make the various school activities real and purposeful and the school should be so organized as to be

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[8] Ross: *Groundwork of Educational Theory*, p. 140

[9] John S. Brubacher: *Modern Philosophies of Education*, p. 330

a reflex of the world, where learning becomes an active process arising out of its utility in dealing with life situations.

To summarize, it will be seen that the techniques of teaching, are governed by such factors as:

"Learning by doing", "purposive activity", "problem-solving", "self-discipline", "the child's present experience", "exaltation of his needs, interests and desires", "integration of the learning process", "reforming artificial system of examination", "co-ordination of work of various teachers" and "socialization of school programme".

Aims of Teaching

From the above discussion of the three main systems of educational philosophies and their implications for educational practice, it is clear that a well-conceived aim determines the teacher's attitude towards his pupils, his choice of teaching methods and the principles governing the techniques of class-room teaching. Lack of a well-defined aim in the teaching process leads to ineffectiveness and a waste of time. A clearly conceived educational goal helps the teacher to consider what ought to be the results of teaching. Pinsent in his book *The Principles of Teaching Method*, states that as a member of a well-organized society, each individual should fulfil three main functions, that of a worker, parent and citizen in each social function; he has certain fundamental needs, namely, knowledge, skill, attitudes and discipline. He develops the two main aims of education, one of social adjustment and the other of harmonious individual development:

> In so far as the aim is social efficiency, the knowledge, skill, attitudes and discipline will appear as factors to be imposed upon the individual. They will appear as impersonal standards and patterns to which he must be drilled and moulded. On the other hand, in so far as personal development is the aim, the knowledge will appear more as food; skill as the means of effective self-expression; good attitudes and discipline as essential conditions for inner harmony which is the foundation of happiness. In this case, the individual imposes his own pattern upon his environment. He sets his own standards of taste and skill. He selects his studies according to his interests which will be

determined largely by the pressure of his native endowments seeking expression and fulfilment. Regarded in this way, education is a process of release for the pupil's powers.[10]

Teaching—in order to be sound and successful—must be guided by certain methods and techniques. These in turn are governed by certain factors which are broadly related to the accepted educational ideology, the educational practice inspired by this ideology, the aims of teaching, the syllabuses of work, the organization of classes, and the reality of local conditions etc.

Just as the educational philosophy and the aims governing the teaching process help in evolving the teaching methods and techniques, there have been attempts in the past made by certain educational thinkers, whose principles have led to such experiments which have helped in evolving special methods of their own. In the next chapter, we shall consider their contribution in the light of the techniques inspired by them. We shall further see how the techniques of correlation have been evolved to realize Mahatma Gandhi's educational vision.

CHAPTER III

EVOLUTION OF MODERN EDUCATIONAL TECHNIQUES

Trends in Modern Education

As discussed in the preceding chapter, the development of educational methods and techniques is dependent on the changes in the understanding of the learning process, consequent upon the changes in the philosophical conception of the nature of men and universe, the aims of education and the social medium in which the individual child is brought up. A change in any of these factors brings about a change in educational practice. In short, educational practice depends on current educational philosophy, current educational psychology and current educational sociology.

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[10] A. Pinsent: *The Principles of Teaching-Method*, p. 18

Modern education has been influenced by many factors. Before the Reformation and the Industrial Revolution, school practices were dominated by religious requirements, but gradually the idea of a National State emerged—with the need for civic training and preparation of the individual for the State. After the Industrial Revolution, the idea that the masses should be literate gained in strength. The development of educational psychology led to the acceptance of *paido-centricism* as the underlying principle of the new teaching. However, the process of education was thought to consist in transmitting cultural heritage through imparting a body of facts and information as well as certain skills. Practising teachers practically paid no heed to the growing demands of the child or his interests and capacities, and they continued to work along the old rut. As a result, pedagogic practices became formalized and stereotyped. The modern principles underlying educational practices thus originated as a revolt against these formal and barren teaching procedures. Those who raised their voice in protest have been acclaimed educational reformers; each of these has contributed his mite to the development of modern progressive ideas in educational practices.

Some Experiments in Teaching Methods

Thus, educational workers and thinkers revolted against the prevailing pedagogic practices which were formalized, barren and stereotyped. Some of them carried out experiments in educational practices for several years before evolving new techniques and methods of teaching. They paid heed to the growing demands of the child, his interests and capacities, and they were in harmony with the principles and trends of a New Education—with differences in their points of emphasis regarding the practice of modern principles. Some of these experiments in teaching techniques are discussed below:

(A) The Montessori Method

Dr. Montessori drew on the principles of Rousseau, Pestalozzi and Froebel and used them in her method. Like

Rousseau, she regarded education as a natural unfolding of the latent powers of the child. Her approach was naturalistic. Like Pestalozzi, she tried to psycholosize and concretize the educative process and devised auto-corrective and auto-educative didactic materials for motor education, sensory education and for 'tool' subjects like language and arithmetic. Like Froebel, she believed in spontaneous manifestation of the child for educational practice. To induce self-activity Froebel devised play, gifts and occupations in his technique of Kindergarten, whereas she devised didactic materials and exercises for spontaneous manifestation of the child. She is more individualistic than Froebel in her method and details pertaining thereto, and relegated the position of the teacher to background. Creation of environment, spontaneous self-expression of the child, technical use of didactic materials and sympathetic and directing influences of the teacher are some of the chief features of the Montessori Method. She brought the growing child into direct contact with didactic materials and not the teacher. Her technique of educational practice stressed the freedom of the child, and the educative process to be done by the educand through self-corrective exercises.

(B) THE COUSINET METHOD

Some educators carried out experiments centring round the *paido-centric* principle of educational practice stressing the individualistic tendency, while others gave emphasis to the social environment of the school and the social experience of the child for the process of education. M. Roger Cousinet was one of these educators. He tried to organize educational practices on the basis of self-government of pupils, and learning in a school which is treated as a school community. He began his experiments in 1910. His technique is more of an approach than a method of teaching. His is a sociological approach regarding the organization of educational practice for training in democracy. School children were directed to have their own self-government.

The school environment, small as is its scale, is the crucible *par excellence* for social experience. In the school, community division of

labour and effective co-operation are, so to speak, visible and tangible. Every one knows every one else, and sees how his neighbour acts. Poorly constructed laws show their imperfections at once. Errors are due to oneself, or to all; other political parties cannot be blamed for it. Beneficent order following after disorder is appreciated immediately, and every one breathes more freely. The work of each for the good of all,—is felt to be indispensable; any one who failed in his duty would instantly cause a disruption of the social machinery.[1]

This experiment inspired movements of self-government of pupils in the modern progressive school based on self-help and mutual co-operation. It trains pupils to exercise their duties and responsibilities, gives them a social consciousness of the concept of duty and responsibility, and is a training for democratic community living. This is given through democratic and community living in the school itself.

(C) The Dalton Plan

The Dalton Plan was first tried out in the high school at Dalton by Miss Helen Parkhurst. It was drawn up in 1919 and carried out in practice in the following year. It is also known as the Laboratory School Plan or the Dalton Laboratory Plan. It shifts the responsibility from the shoulders of the teacher to the shoulders of the pupils in the acquisition of learning, and thus encourages self-study. Assignments of educational units take the place of lessons, subject teachers supplant class teachers, and class-rooms are turned into laboratories. Time-tables are scrapped and freedom is allowed in working on the assignments.

In this plan, emphasis is laid on individual differences, and it allows the individual to prosecute his study in a spirit of self-study. The pupil gets freedom to plan and allocate his time according to his needs and requirements. Pupils choose a subject in which they are specially interested, and study it as long as they like—there being no bells to ordain the leaving of one subject and the starting of another. The sense of responsibility comes from within to finish the assigned unit. Discipline is 'free'. Moreover, the

[1] Adolph Ferriere: *The Activity School* (edited by K. G. Saiyidain), pp. 146, 147

responsibility which the pupil accepts for the work acts as an incentive. The pupils—by apportioning their time to different activities—acquire a sense of proportion and thus become self-confident. It makes the school a social group where pupils come into contact with one another, as well as with the teacher, for the successful execution of the assignments. This contact is educative in itself.

The Dalton Plan gives a special place and responsibility to the teacher. He has to prepare suitable assignments and give them to the pupils as and when required. He has to preserve an atmosphere of study in the laboratory-room and explain details of the assignments and remove the difficulties of the pupils. He has to keep a full record of the progress made by pupils in different standards and to give collective explanations of the difficulties if he thinks it advisable.

Just like the Montessori Method, this plan also recognizes the individualistic tendency in older students, and the individual assignment as spontaneous expression in the process of education. The Dalton Plan brought the following features into prominence in modern educational practices:

(1) Self-study of subjects as a process of active learning, for self-directed learning is more important than class teaching of subjects.

(2) To train pupils to be earnest in their desire to complete successfully the assigned work within the scheduled time.

(3) To foster a spirit of inquiry, and the necessity of 'give and take' to acquire purposeful knowledge.

(4) To make the teacher eager to know and record the individual differences of pupils and record their progress in detail.

(5) To make the child aware of his own progress and help him to achieve further progress at his own inclination, capacity and speed.

Shortcomings experienced by traditional types of examinations are thus removed to a large extent. This plan gave a new outlook to the teacher for his job. He has not

to teach, but to create an atmosphere of study, to plan the details of study and to test and record the progress of pupils. The very execution of the process of study has to be done by the pupils themselves. It gives opportunities for their free and spontaneous manifestations. As such, the plan is more suited to secondary schools than to primary schools.

In the evolution of teaching techniques and methods, some educationists stressed the individualistic or social process of learning, others emphasized unification of learning processes while others emphasized the acquisition and drilling of 'tool' subjects.

(D) The Winnetka Plan

The Winnetka Plan was originated by Dr. Carleton Washburne, Superintendent of Schools in Winnetka, U.S.A., and is based on the following principles:

(a) Every child should master those facts and skills which he will probably need to use in life.

(b) Every child should live naturally, happily and fully as a child.

(c) Human progress depends on the development of each individual to his full capacity.

(d) The welfare of human society requires the development of a strong social consciousness in each individual.

In the Winnetka Plan 'tool' subjects—reading, writing and arithmetic—are taught on graded and systematic lines, while the other subjects are approached through projects:

The curriculum is accordingly divided into two parts, the first part common to all, the second part based on individual interests. The time of each school session is divided equally between the two types of work. The essential facts and skills have been determined by investigations, and research is also being done to discover at what stage of a child's development each item can be most effectively learnt. All children are required to master the first part of the curriculum, but they are not expected to do so at the same time. The work is carefully graded in well-defined steps so that each child can work individually, proceeding from step to step by means of self-instructive,

self-corrective teaching materials. . . . The first part of the curriculum includes arithmetic, language, reading, spelling, general science and social studies. The essential facts connected with the social studies (history and geography) are learnt individually, but each new topic is introduced by a class discussion. Social studies converge into the second part of the curriculum, which consists of group and creative activities, in which children are not expected to be alike, and on which they are not tested. . . .

A special technique has been developed in order to prepare children for creative activities. . . . Though preparation for self-expression is necessary, for, expression in the Winnetka schools is considered to be "the overflow of rich experiences", it springs from "a background of information, imagery and feeling", and this background is given by the intensive study of one topic for several weeks. Not until the children are full to overflowing with a feeling for the topic, are they considered to be ready to choose some creative activity.[2]

This plan also gives scope to individual as well as group creative activities. The school is run on self-governing lines.

This plan bridges the gulf between the individualistic and social tendencies, gives an indication for constructing a curriculum giving scope to creative activities and providing the necessity of having a graded systematic course of training of 'tool' subjects on the strength of research work. The plan establishes the need of having a graded and systematic process of active learning and denies the process of learning to be mere spontaneous manifestation of the child. It aims at satisfying the present, as well as the future needs of the pupils.

(E) The Decroly Method

Like Montessori, Decroly first became interested in education through teaching defectives. He was a physician in Brussels, where, in 1901 he founded a school for defectives. In 1907 he established a school for normal children so that he could apply to their education the principles, he had formulated, as a result of his experience in his special school.

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[2] A. G. Hughes and E. H. Hughes: *Learning and Teaching*, pp. 388, 389

The fundamental idea of the Decroly Method is that children "learn through living". He recommended that schools should be amidst natural surroundings where children can observe the phenomena of Nature and the manifestations of life in plants, animals and man himself. A special feature of the scheme is the organization of the subject-matter of the curriculum as a "programme of associated ideas". It is divided into two main branches:

(a) A study of living creatures including man, and

(b) a study of the surrounding universe including society.

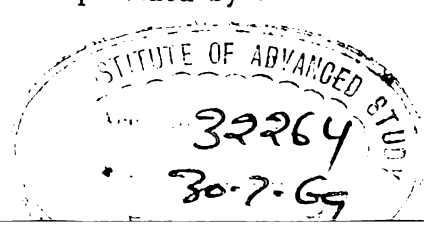
These studies are pursued not by studying a number of isolated academic subjects, but by exploring a number of important "centres of interest". The centre of the course of study is the child himself, so that the work begins by direct observations.

This method tends to prevent too much emphasis being placed on those branches of curriculum that can be taught orally. Oral instruction is, of course, necessary in order to extend children's knowledge of facts, not directly accessible to them in time and space. These facts are made meaningful by being compared and associated with the facts learnt by direct observation. Finally, the study is completed by some form of expression of which Decroly recognizes two kinds:

(a) Concrete expression, such as model making and drawing.

(b) Abstract expression, such as reading, speaking and writing.

In a Decroly class the first part of the morning is devoted to work in the technique of language and numbers through competitive games, followed by lessons in observation, comparison and association together with a study of practical subjects like handwork, singing, drawing and physical games. The afternoon is devoted to manual work and to foreign languages. The techniques of reading, writing and spelling are not considered the most important aspect of education in the early years; they are taught as part of the general experience provided by the centres of interest.



Much importance is attached—in the Decroly school—to social training. "Comparisons are never made between a child and his fellows. He is compared only with himself, with his own record, which he is constantly trying to improve." The school is organized as a miniature community.

The Decroly Method emphasizes the importance of direct observation work, manual work and presentation of literary subjects connected with the interests of the child. It prescribes the organization of routine activities of the school and interpretation of the curriculum and the organization of the school community on a democratic basis.

(F) The Project Method

The Project Method is the practical outcome of experiments of pragmatists like John Dewey, Kilpatrick and others. Pragmatism aims at the child acquiring for himself the knowledge and skills necessary to deal effectively with situations in real life. Education is not so much teaching the child, as encouraging him to learn for himself through experimental and creative activity. Hence "learn by doing" is a maxim of pragmatists, who distrust bookishness and believe that the child learns much better from his own activity than from constant instruction. Their method is to put the child into situations and provide him with the means of dealing with them successfully. Instead of working at separate subjects, the pupil is encouraged to draw freely upon all knowledge that is relevant to the activity. School studies are to be integrated within the school, as their counterparts are integrated in the world outside. The principle of integration is the life and experience of the pupil and his present activity.

The Project Method puts in the foreground of the learning process a definite problem to be solved. The problem comes first and the learning is incidental to its successful solution. Projects may be individual or social. The latter are called socialized activities which involve participation in social relationships, division of labour, and willing acceptance of responsibility towards the community.

They also provide rich experience in co-operation. Every project implies a fourfold sequence—purposing, planning, executing and judging. On the basis of experiment, work of educational practice, pragmatists have evolved four kinds of projects—the producer's type, the consumer's type, the problem type and the drill type.

The Project Method has given the following features to modern educational practice:

(a) To establish a relation between the life of the child and his desires, purposes, interests and inclinations.

(b) The method should make the learning process purposive.

(c) Learning through one's experience. The child has a natural aptitude for doing and making things, and this has given rise to the activity principle in the learning process. It does not merely imply the importance of practical work as a means of instruction in all subjects. It means putting the child into real situations, so that he may be able to grapple with them and solve problems that arise therefrom, through the process of experimentation.

(d) There should be integration of curriculum and it is possible, according to pragmatists, if knowledge and skill are acquired through activities that are purposeful. It is a method in which the school, the curriculum and the contents of studies are considered from the child's point of view. The child is learning through purposeful living in a social environment. It is asserted that this method is based on the psychological laws of learning, that is, the law of readiness, the law of exercise and the law of effect. The method encourages a democratic way of learning. Instead of fostering rivalry and competition, it includes co-operation, thinking and acting together for a common purpose. The method upholds the dignity of labour and imparts valuable lessons in citizenship. It fosters the problem-facing and problem-solving attitude rather than cramming and memorizing. But it tends to have gaps and lack of system or vagueness in knowledge because all learning is incidental. The judicial mixture of the regular drill work with incidental learning becomes necessary. The method

makes the process of learning active, purposive and socialized.

Underlying Principles of Modern Experiments

From the foregoing discussions regarding the trends in modern education and regarding the contribution of educational thinkers and workers along with their techniques and methods of educational practices, it can be deduced that the following are the underlying principles of New Education:

(A) Recognition of the Importance of the Educand

Each child is to be regarded as a personality with a uniqueness about it. Each child and its individual differences are to be recognized, respected and attended to for the development of his personality through the educative process. The child has become the centre of all educational activities and the new educational practice has become *paido-centric*. The learning of the child has become more important than the teaching of the teacher. The child and his active learning have come into prominence. Spontaneous self-expression of the child through self-directed activity has now become the basis of educational practice.

(B) Emphasis on Activity

From Bacon, Montaigue, John Locke, the encyclopaedists up to the present-day philosophers and educationists, it has been one long protest against scholasticism and its divorce from Nature and reality. They belonged to different schools of thought or philosophy, but are all agreed on making education more concrete and real, and less oral and dogmatic. They emphasize the value of practical and creative activity. Science has done away with the antithesis between body and mind. It has shown that truth can be achieved through sense-experience as well and recommended the integration of theory and practice.[3]

The principle, however, that education should have reference to reality, and that theory and practice should be mutually combined and strengthened, was never altogether lost sight of. It gained recognition in the science laboratory and the polytechnic school. Scientific invention

[3] J. B. Kripalani: *The Latest Fad*, p. 31

has brought practical work into prominence in educational practice, and research work in child-psychology has made experience and activity the basis of educational practice. It has proved that every human experience has a physical as well as a psychical side. Psychologically it is felt that a child is innately active. His nature needs a good deal of physical activity for its own expression and unfoldment, and this need must be reconciled in educational practice. Rousseau, Pestalozzi, Herbart, Froebel, and a host of other educational reformers and practical teachers down to John Dewey, and the present Bolshevik reformers of Russia, all in one way or another, advocated the idea that instruction and knowledge can best be imparted and assimilated, and the child's capacities made to develop, through practical work done by him in the school. They, therefore, in their own ways made educational practice creative—according to their particular concept of pedagogy.

Pestalozzi, believing education to be the organic development of the individual, emphasized object-lessons and training in sense perception. He believed that development comes through activities initiated by the general desire for action and consequent experience. He gave the psychological concept to educational process. Froebel and Montessori elaborated the theories concerning child psychology. They constructed practical devices to encourage the child to manifest his innate tendency to activity which, according to them, should form the starting point of education.

(C) The Stress on Co-operative and Community Activities

While the scientific tendency made education practical, the knowledge of child psychology made it spontaneous and creative, and the democratic tendency made the process socialized. The Montessori Method and the Dalton Plan emphasized the individualistic tendency in the process of learning, while the Cousinet Method, the Project Method and other techniques made educational practice social and democratic. They recommended

purposeful socialized activities and self-government by the pupils as a process of active learning. They tried to practise the dictum of Nunn, "Individuality develops only in a social atmosphere where it can feed on common interests and common activities."

They do not encourage eccentricity but try to develop the individuality of the child through a social medium full of purposeful activities. Schools are expected to provide an atmosphere which is conducive to real democratic living based on free, co-operative and creative activities. Discipline is not superimposed; it comes from within as a felt need of the organized democratic living of the school community.

(D) CONCENTRATION OF THE CURRICULUM AND INTEGRATION OF LEARNING

In the new approach to methodology, the process of learning of the child is of greater importance than before. To make it active, natural, methodical, interesting and fruitful, integration or concentration of the contents of the curriculum and correlation or integration of the processes of learning in educational practice are necessary. For systematic educational practice, Herbart produced the technique of Herbartian steps of teaching based on psychological truths, and recommended the integration of the curriculum and a process of correlation for presenting the contents of studies. After Herbart, many practical educational workers experimented with this idea of constructing a concentrated curriculum and evolving a technique of integration of learning. Some of them tried to achieve interrelation of different subjects of the curriculum in the actual process of teaching. Some tried to correlate different subjects of the curriculum with the subject which was treated as the core subject of correlation of their concept, and some tried to concentrate the curriculum—integrating the experience, knowledge and life of the child. They tried to correlate purpose, skills, habit and knowledge of the child through individual or social projects and activities thus making learning incidental.

In the Project Method, the project-centred curriculum resulted in the correlation of purpose, experience and

knowledge. Correlation produced unification of different aspects of learning like doing, knowing, feeling and willing, but it could not produce integration of the effects of learning. Through the process of concentration, unification was achieved, but, at times, it was at the cost of the integration of the effects of learning. To fulfil this need for a systematic and well-graded integration of the effects of learning, various techniques for drill work, review work and methods of teaching were evolved. The Winnetka Plan and the Decroly Method are some of them.

To counterbalance the defects of each technique and to evolve a method of teaching, aiming at the harmonious and integrated development of the personality of the child as a member of society, a group of people belonging to various inter-national organizations started, at Geneva, in 1924, an Ecole International (International School), which had as its patrons Dr. Decroly, Mr. John Dewey, Mr. Carleton W. Washburne and Dr. Ferriere. This school was the first experimental school of its kind started on an international basis, and different techniques and methods were practised to formulate systematic principles of the New Teaching.

The time-table at the international school of Geneva was divided into three parts. The first part of the morning was given to individual work according to the technique of Mr. Carleton, the rest of the morning was given to group work, in which the director of the school applied Dr. Decroly's method of centres of interest and finally, in the afternoon, the pupils took up free group or individual projects according to John Dewey's principle. This type of well-organized unification of different techniques and methods is necessary to keep educational practice dynamic and progressive.

(E) Modification of the Status, Duties and Privileges of the Teacher

New Education has made the teacher a friend, philosopher and guide of children. Thus, today, he is not concerned with imparting oral knowledge of a bookish sort but rather has to help children to achieve a wholesome and harmonious development of all their powers and

abilities. For this, he has to create the right atmosphere in which to plan, guide and supervise their active learning processes for their harmonious development. Not teaching, but guiding — through organized living of the school community — becomes the role he has to play. He has ever to keep in mind that educational process is no longer regarded as mere pouring in inert information but a process of continuous development or modification of the whole personality of the child. The teacher, in modern educational practice no longer instructs, but guides, directs and encourages the pupil to explore the vast fields of experience and learning. There is a democratic approach which encourages self-activity and active learning of pupils. The project technique gives freedom to pupils to choose their activities with a purposive aim, and to plan, execute and assess their results, while the assignment system of the Dalton Plan throws the entire responsibility of learning—striving for exploration of avenues of information—on the learner himself. Similarly, the Heuristic, the Laboratory and Experimental Methods give the pupils an opportunity to experience the thrill of the discovery through self-activity and effort. Thus, in modern education, learning is more important than the theoretical teaching of the teacher.

It can be said that present-day trends have contributed the following features in current educational practices:

(a) *Paido-Centricism* in the process of educational practice.

(b) Active learning of the educand is stressed and self-study in a free atmosphere is encouraged.

(c) Activity principle has been made the basis of educative process.

Thus, educationists of different schools of thought have emphasized these features, each in his own way. While individualists advocated self-activity of the educand, realists and democrats emphasized the sociological and productive aspects of activity. They did not merely advocate free and spontaneous activity but recommended creative and constructive activity of the educand as the basis of education and as the medium of the technique of educational practices. Creative and constructive activity—in the form of manual

activity—gradually became the basis of education and the medium of the technique of educational practice. It is worthwhile to see the different positions assigned to manual activity in the process of education.

The Place of Manual Activity in Educational Practice

Modern trends have made the educational process creative. From Rousseau down to the present-day educationalists, all have emphasized the activity-principle, as a reaction against bookishness and empty verbosity. This principle has been advocated and worked out in different ways by different educationists. They recognized that the child has a natural aptitude for doing and making things, which has been channelized into different forms of activity by different educationists. Individualists channelized this urge in the form of free self-activity as a means of spontaneous and joyous manifestation of inner life as a process of education, while others who had sociological thinking in mind channelized it through purposeful and social experiences of life. Some tried to channelize it through manual activities in the form of vocational or industrial training. The creative and practical aspect of child's nature has been respected in different ways for educational purposes.

Industrial training had been recognized as a phase of education by Rousseau, but upon social and economic grounds. Pestalozzi introduced object-study and manual activities largely from the receptive point of view or that of developing sense perceptions. On purely educational grounds, Froebel gave to all manual training and constructive work the place which they occupy in modern schools in the West. Through them the child is to develop power, as each activity is to the child but an expression of some idea or purpose gained through instruction.[4]

Thus, the creative nature of the child has been utilized in educational practice for different purposes. The individualists emphasized the free activity of the pupils believing that the school is to provide rich experience to the pupils and they are expected to learn themselves. With the increase of scientific knowledge, the development of

[4] M. S. Patel: *Educational Philosophy of Mahatma Gandhi*, p. 67

democracy and industrial civilization, as also the gradual popularity of Marxism, education began to have an increasingly social and productive emphasis. This social outlook and the trend of realism shifted the emphasis from the activity being free and spontaneous to its being productive and constructive in the form of manual activity. It has been given different positions in the process of education by different educational workers. Some introduced manual work as one of the subjects of the curriculum from the utilitarian point of view, and as a process of vocational training yielding to technical skills and production. Some emphasized the subject of manual training at the service of other subjects making it the means of correlating other subjects of the curriculum.

While tracing the historical and philosophical aspects of the activity movement, Gustav G. Schoenchen observes as follows regarding the manual training:

> When activity-pedagogy takes the form of a subject, 'manual training', its most striking difference from activity pedagogy as a method, lies in the fact that it is taught in specially designed workshops. But this implies no severance of the close connection between the work of these classes and that of other classes of the school. Indeed, it has been the experience of educators that manual training correlates more easily with other subjects than the traditional subjects do among themselves. On the other hand, it should be remembered that, while manual training should cultivate neighbourly relations with the other subjects, the directing influence in manual training should be the inculcation of various skills. Only on this basis can the special advantages—health, aesthetic tastes, training of will, socialization—of manual training be achieved.[5]

Manual activity has been utilized in education for two purposes:

(1) Manual activity in the form of various kinds of manual training has been made a subject of the curriculum.

(2) Manual activity in the form of creative learning raised to the position of an educational principle of the method.

Gradually, manual activity assumed dignified position in the system of education, not as a subject of the curriculum

[5] G. G. Schoenchen: *The Activity School*, p. 100

or as a means of correlating other subjects of studies, but as the centre and basis of education. The problems resulting from industrial civilization and the democratic concept of man and of the State raised manual work to a dignified position in the system of education. Industrial civilization stressed the utilitarian aspect in education and made the vocational aim important. Preparation for a vocation became the pressing need of the time as the earning of a livelihood became very difficult in the modern world. Moreover, modern professions are so complicated that they require long and special preparation to achieve success in them. This made manual work and manual training important in modern educational practice. Realism and democracy accentuated the importance of the tendency to make education practical and useful rather than merely ornamental. The modern democratic attitude is realistic, and the realist wants no cleavage between the life of the child and the education he receives. He protests against an educational system which does not correspond with the actual structure of modern society and with the realities of life. Democracy grants an opportunity to every individual to be cultured, and in a real democracy every cultured individual is expected to labour for the good of the community.

Thus, the acceptance of manual work as a centre and basis of education has been the cry of the day, and we feel the echo of this demand in the system of education advocated by the different educational thinkers and workers. Modern reformers in the field of education have not been mere philosophers concerned with educational theory, but many of them have thought of education in terms of social and political reforms. They have carried out experiments and have run institutions. Belonging to different schools of thought and believing in different ideologies, they recommended an education based on manual work to reshape the life of the individual as well as to reconstruct the structure of society according to their ideologies. From the earliest time socialists of various creeds have recognized labour and activity as the basis of every good education. Karl Marx and his followers recommended the erection of

the structure of educational system on the basis of manual labour.

To realize objectives, unified labour schools were started in Russia and manual work became the basis of educational practice:

> The instruction imparted in these schools of the U.S.S.R. was essentially based on the fundamental doctrine that labour is the centre of all educational activities. The scheme of studies was based on quite a rich variety of correlation in the form of complexes or synthetic themes. Divisions into separate subjects were abolished and all science and humanities were distributed into three columns with labour in the centre and society and Nature on either side.[6]

Thus labour became the core of education and a technique of correlation was formulated for the process of education. Just as in Basic Education basic craft becomes the central axis of the school, so labour became the central axis of the entire school in the Soviet experiment. But labour is not understood in its orthodox and narrow sense of the term but had broad educational implications. Pinkwitch, the official chronicler of Soviet education writes about the unified school as follows:

> A unified school therefore places the labour of the people at the centre of their education. The basic theme penetrates the programme of the school in all its stages and the approach to labour is not from the point of view of a specialist but is from the point of view of a builder of new life, who, regardless of his profession, must have a clear comprehension of the relations and inter-dependence of various forms of labour. Such a comprehension we call education. In its work, school must be connected most intimately with reality. A prominent place must be given to productive labour. . . . The reader should be reminded at this point of the tremendous social and political role of labour in the school. To us labour does not mean labour process nor self-service nor school-work nor shop but the central axis of the entire school.[7]

Thus becoming the centre of education, the word 'labour' receives new implications. In his volume entitled

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[6] H. T. S.: *Two Years of Work*, pp. 165, 166

[7] J. B. Kripalani: *The Latest Fad*, p. 43

The Fundamental Question of Social Education, Shoolgin states the position of the Communist party thus,

Labour to us is means of introducing children into the working world family in order that they may participate and understand the struggle of the masses, follow the history of human society, acquire working, organizing and collective habits and come into possession of the discipline of work.[8]

Kushensteinei advocates manual work as a means of developing the civic ideal. He, in the capacity of the organizer of public education at Munich, holds that at the primary school age the dominant tendency in the child is physical activity:

Vocational education. . .must emphasize physical labour executed carefully, honestly, thoroughly and seriously. Such manual work requires co-operation and organization in some kind of community. This naturally teaches the child ethical and civic principles.[9]

Even the pragmatic philosopher John Dewey, while giving his democratic concept of labour and leisure and social function of the school, contends that the present organization of the school does not correspond with the organization of society and the needs of the time. He says,

Practically all the conceptions associated with culture and cultural education originated at a time when the immense superiority of a leisured class over all working classes was taken as a matter of course.[10]

Summing up his idea of educational reform by enunciating his principles, Dewey recommends as follows:

We must use all work in wood and metal, of weaving, sewing and cooking as methods of living and learning not as distinct studies. We must conceive of them in their social significance as types of the process by which society keeps itself going, as agencies for bringing home to the child, some of the primal necessities of community life and as ways in which these needs have been met by the growing insight and ingenuity of man; in short, his instrumentality, through

[8] J. B. Kripalani: *The Latest Fad*, p. 42

[9] *Ibid*: p. 38

[10] *Ibid*: p. 39

which the school itself shall be made a genuine form of active community life, instead of a place set apart in which to learn lessons.[11]

Herein Dewey comes very near to the teachings of Mahatma Gandhi, which recommended that education, through useful crafts, should fulfil the basic needs of life. In this way, activities based on manual labour were given an important place in the system of education. The form of manual activities and their organization as a process of education differed in various countries according to their particular concept of democracy. In Russia, the economical aspect of manual labour was stressed while in the experiments of John Dewey the sociological and the psychological aspects were stressed.

Thus manual work is emphasized in different ways in the history of modern education. This has been made clear by a prominent Indian educationist, Dr. Zakir Hussain. In his presidential address at the Second Basic National Education Conference held at the Jamia Millia, Delhi in 1942, he stated that work would form the centre and basis of the new (basic) education. He clarified the different positions given to work and said:

> It is not only today that we talk of making work a part of education. People have been saying this for quite a long time. But each has said it in his own way. For one, 'work' is principle, and should be accepted as such, without being added on to the curriculum as a 'subject'; for another it is a 'subject'; it should have a period allotted to it, and no further changes need be made in methods or in the syllabus; for a third, work must be such as yields a return; and, last, but not the least, there is he who says that all activity is a blessing, that children must be allowed to move about and to do things, and it does not matter if their activity does not produce anything, for children are not labourers, their activity is creative.[12]

Thus, work has been accepted as a principle and has been made the centre and basis of basic education. Mahatma Gandhi also advocated manual work, in the form of a village craft, to be the basis and medium of education, but in his own way.

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[11] J. B. Kripalani: *The Latest Fad*, p. 40

[12] H. T. S.: *Two Years of Work*, p. 31

THE GANDHIAN APPROACH TO EDUCATION

Shri J. B. Kripalani has clarified the idealistic aim of education of Gandhiji and his spiritual concept of man and of society in a book entitled *The Latest Fad.*

Gandhiji was a dynamic personality and a creative genius. All his socio-political plans and activities are organically correlated and integrated, and they are evolved out of his creed based on his philosophy of life—social and individual. For him the individual has a divine origin and a divine destiny and therefore his aim was spiritual and not material. He believed that the individual has to work out his perfection in a spiritual society based on the principles of non-violence, truth and justice. He was convinced that society is continuous and it has a sort of immortality which consists in eternal progress. This progress is its ever-increasing mastery over Nature and the resultant refinement of culture and civilization. Though he maintained that the individual was spiritually inclined and society immortal, yet, he saw that the individual worker—a village kisan or an industrial labourer of a city—was being oppressed by poverty, disease and death under the pressure of industrial civilization and political bondage. He wanted to revive the spirituality of the individual and the immortality of society through the medium of education, based upon creative and constructive manual labour. He wanted to reconstruct the life of both the individual and society, giving them new values through education. In this context, we have to interpret manual labour as a basis of the system of education sponsored by him. He himself has given a clear concept of this type of education and its medium in the Foreword written by him for the second edition of the book entitled, *Basic National Education* which is the syllabus prepared by the Zakir Hussain Committee to implement the scheme. In this Foreword, Gandhiji gives the purpose, the medium, and the environment of education of his vision. He states:

What Zakir Hussain and his Committee have called Basic National Education is exciting fair interest in India and outside. A more correct, though much less attractive, description would be Rural National Education through village handicrafts. 'Rural' excludes the so-called higher or English education, 'National' at present connotes truth and non-violence and 'through village handicrafts' means that the framers of the scheme expect the teachers to educate village children in their villages so as to draw out all their faculties through some selected village handicrafts in an atmosphere free from superimposed restrictions and interference. Thus considered, the scheme is a revolution in the education of village children. It is in no sense an importation from the West. If the reader bears this fact in mind he will be better able to follow the scheme in the preparation of which some of the best educationists have given their undivided attention.[1]

Herein Gandhiji speaks only of the stage of basic education and not of Nai Talim covering different stages of education throughout one's life. Moreover, he speaks of the education of rural folk. On the strength of various experiments of the scheme and on further consideration, after the period of seven years, in 1945 he expressed his views regarding Nai Talim as a scheme of education for the rural as well as the city area. In the statement quoted above, he gives his fundamental principles regarding his approach to education based on manual work. He recommended manual work as a principle with a different ideology.

His spiritual concept of an individual and society, emphasis on truth, non-violence and justice coupled with a realistic attitude regarding prevailing condition of human beings under the pressure of industrial civilization and the impracticability of bookish knowledge inspired him to recommend manual work as the basis of education. He advocated creative and constructive manual labour to be the content of education as well as the technique of teaching. He used the word 'craft' which is symbolic of creative manual labour and which synthesizes the social and physical environments of the educand:

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[1] H. T. S.: Foreword written by Gandhiji to the second edition of Zakir Hussain Committee's Report

The craft idea is generally recognized as being in some ways the most distinctive contribution of the scheme (and initially of Mahatma Gandhi) to the question of the curriculum. While educationists during the last few decades, have theoretically recognized the importance of practical and productive work, and in many progressive schools the idea has been partially put into practice, e.g., schools run on the Project Method, 'new schools' in the West, some of the children's schools inspired by the influence of Froebel and Montessori, it is to the credit of the Basic Scheme that it has bodily admitted the full claims of craft work and given it the central place in the curriculum that it deserves. The half-hearted introduction of handwork or manual training as a 'subject' would not have met the objective of this curriculum. This has been tried in the past but it has had no vital effect on the nature of education because it was looked upon as an 'extra' and not woven into the curriculum as an integral part. The result was that, at best, it gave pupils the little training of the hand and the eye but left the rest of the curriculum and the methods of teaching untouched.

Under the new scheme of education, the teaching of some craft is the centre of education and the other subjects of the curriculum are integrally related to it, thus providing a natural and effective method of co-ordination amongst them. Moreover, the craft is not to be taught mechanically as merely a means of manual training but 'the why and the wherefore' of the processes involved, its larger significance in, and relationship to, life will be made clear to the children. Thus craft work will be illumined with meaning and its underlying technique—of activity, investigation, resourcefulness, fitting of means to ends, respect for work—will also flow over, into the rest of the curriculum. It is in this spirit that the introduction of crafts into our schools is advocated, and it is only when this spirit inspires its teaching that the New Education can become an instrument for inculcating a new mentality and a new social and practical outlook in our children. Otherwise, it is idle to expect that it will, by itself, cure unemployment or lead to a more just or rational organization of the social order.[2]

Gandhian Approach *v.* the Modern Methods

(A) Emphasis on Child's Creative Nature

Just like all modern educational thinkers and workers, Gandhiji put the child at the centre and stressed his

[2] K. G. Saiyidain: *Introducing the Basic Curriculum*, pp. 22, 23

harmonious development. He emphasized the drawing out of all his faculties through productive manual work as a process of education. Just like Dewey and others, he was against stuffing the mind of the child with formal and abstract knowledge given on a purely academic and theoretical basis. He was not against literary training nor did he recommend vocational training cum literary training. He recommended such literary training as is useful in life and is to be attained in correlation to work. He believed that the child should acquire, not superficial literacy, but something higher. His approach was psychological. Respecting the creative nature of a growing and dynamic child, he recommended the activity principle in his own way. He suggested that the creative urge of the child should be channelized and manifested through productive and constructive work. He made the educational process, not only creative but productive too. He advocated manual labour to be the basis of education and it should be manifested through activites which are productive in the form of some selected basic craft which fulfils the basic needs of both the educand and society. He was against advocating an activity simply for the purpose of spontaneous manifestation and for the temporary joy of creation by the child. Modern educationists did respect the *paido-centric* tendency and did contribute to making the educative process creative. But Gandhiji tried to make it not only creative but also productive. Herein lies his unique contribution.

His technique differs from the educational practice of the activity-school or the Project Method wherein activities are recommended for creative joy and for making pursuit of knowledge purposeful. He felt that educational practice based on the activity principle, stressing simply the creative side, becomes too costly and hampers one of the chief demands of the universality of education in a democratic State. He believed that it was economically and even morally unsound to utilize the creative energies of the child for temporary purposes and to allow the products of their activities to be wasted. He wanted to solve the problem of universal education by providing creative manual labour to be the medium of education and through it, to reconstruct

the life of the individual and society. Just as he did not want to maintain the need for an 'activity', simply on the basis of creative joy, he never maintained that the introduction of a manual activity as a medium of education should be on the mere basis of mechanical productivity. He wanted the harmonious and integrated development of personality of the educand through a craft and other manual activities. Thus, they are to be taught, not as additional contents of the curriculum, but as an integral part, and indispensable means of education. Manual labour becomes the content, medium and the method of education. He recommended the 'why' and 'wherefore' of the processes of a craft and other manual activities. In this manner the scientific and the social aspects are stressed in Gandhiji's approach to education.

The Gandhian technique accepts the technique of the Project Method but the fundamental difference is with the selection of the type of activity to be given to the child. He would not allow a child to do anything simply for the joy of creation or for mere pursuit of knowledge. He recommended such manual work, the practical results of which contributed substantially towards the development of the personality of the child as a member of the co-operative and democratic community. The difference lay in the selection of an activity and not in the purposeful and systematic procedure of participation in an activity as a process of education. He recommended manual labour, which is not only creative but also productive as a medium of education and wanted to utilize it scientifically and socially to achieve the objectives of his scheme. A misconception prevailed that Gandhiji recommended only a craft as a medium of education wherein manual labour is productive and remunerative. This has been refuted by Shri Kripalani:

Some have interpreted the scheme as mere craft-centred system of education putting it to the position of mere technical education. Gandhiji's ideas, even when they are formally accepted, are not worked in the spirit in which he would wish them worked. In the case of his educational scheme the writer knows that in several places mere technical education is being confused with Gandhiji's unified and

integrated scheme. Such schemes of technical education are bound to fail. They will so add to the cost of education and will yield such poor results that they will be abandoned in despair.[3]

As a matter of fact, Gandhiji recommended craft as well as other manual activities of a constructive nature whose practical results do not appear, at first sight, as remunerative as those of the crafts. Manual activities in the form of individual and community *safai* (sweeping), community kitchen activities, fetching water and scavenging for the community etc. are essential for the maintenance and development of community life based on self-help, mutual understanding and mutual co-operation. They do not yield material benefits of a visible nature nor do they give practical results which are remunerative in terms of money as those of the finished products of the crafts. But such activities are essentially constructive and they contribute substantially towards the wellbeing and development of co-operative and integrated community living. Thus his approach towards the medium of education is psychological, sociological and moral.

(B) Emphasis on Concreteness and Reality

In his scheme of education, manual work becomes the basis of education along with the social and physical environments of the child. For the purpose of learning the child has to work, observe and utilize the environmental forces. In this respect the scheme is nearer to the scheme of the unified schools of Russia. Yet the approach of Gandhiji has a fundamental difference. In the Soviet experiments, the labour school was started near the factory or work-shop, while Gandhiji recommended that rural basic schools should be in the villages themselves and surrounded by Nature and the culture of village life.

For his proper education the child has to be in touch with the craft, the society and the Nature surrounding him. Through work he achieves sense training, and under the guidance of the teacher the child has to carry out purposeful observation and the work assigned to him, and thereby gets direct scope for achieving real and useful

[3] J. B. Kripalani: *The Latest Fad*, p. 47

knowledge through the needs arising out of daily life situations. In the same way, he receives skills, habit-formation and attitudes, not through the pages of the book or through the talk of a teacher, but through the actual living of the purposeful life of the school community. This is education for life through life.

(C) The Place of the Teacher in Basic Education

Gandhiji put the child at the centre but did not relegate the teacher into background as in the Montessori Method or in the Dalton Plan. He has recommended the inspirational methods of teaching and has given a dignified and responsible position to the teacher. He emphasized inspirational methods, not based on oral preaching, but rather on the actual living of the teacher worthy to be followed by the child. His idealistic aims exalted the position of the teacher but his democratic concept prohibited the authoritarian treatment by the teacher. He wanted the teacher to be an inspiring friend, philosopher and guide to the educand. An idealist, he encouraged a living bond between the educand and the educator. Dr. Montessori kept the educand in direct touch with inanimate didactic materials, Froebel gave importance to 'gifts' and 'play'. In the Dalton Plan, books etc., are of great importance for self-study. In all these techniques, children were deprived of the dynamic influence of the teacher who was relegated to the background. Gandhiji gave prominence to the teacher and believed that the teacher who was full of life, character, insight and love could mould the life and learning of the educand. He did not believe that only costly teaching aids, materials and buildings created an atmosphere conducive to education. He laid special stress on the character of the teacher which created educational environment. Thus, in his scheme the teacher is given a dignified and exhalted position along with the child.

(D) An Atmosphere of Freedom and Self-discipline

From Rousseau down to the present time, educational workers have emphasized the fostering of an atmosphere conducive to democratic self-discipline. Gandhiji, a staunch fighter for freedom was one of those who advocated

freedom for the education of the child. He wanted teachers to educate children so as to draw out all their good faculties through some selected village handicrafts in an atmosphere free from superimposed restrictions. In the same way he advocated an atmosphere of freedom for the educator also.

While modern educationalists are against having discipline that comes from without and is based on fear, suppression and teacher's domination, they are also against capriciousness and irre ponsibility on the part of the pupils. They have tried to strike a balance between the two positions stressing different factors in their techniques to develop a sense of social responsibility and self-discipline. Though Dr. Montessori and Miss Helen Parkhurst emphasized the individualistic tendency in education, they tried to solve the problem of discipline in their own ways. The former tried to solve it through her didactic materials and exercises and the latter tried to give a sense of achievement and progress through her own technique—by encouraging pupils to complete their contracts of study, in the form of assignments. Pragmatists through their technique of 'projects' try to give a sense of worthiness by fulfilling the projects successfully and efficiently. In the Gandhian approach, it is the social consciousness of the concept of duty and responsibility that fosters the spirit of self-discipline. Community life is integrally organized. Though there is the distribution of work and labour, yet the integration of the organization of community life is such that the welfare of the whole community depends upon the quality and quantity of work done by each individual of the community. Each learns to realize the social implication of his work and becomes conscious of the result of work performed. An illustration will clarify the point. If the work of fetching water, cutting vegetables for the community kitchen, or the work of scavenging, assigned to an individual or to a group, is not done well or not carried out at all, not only the individual or the group, but the whole community will have to suffer the result, arising out of neg igence and indifference. This social consciousness arising out of integrated

organizat on of such group activities of the community gives the sense of social responsibility to the educand. He learns to value work not only from the individual point of view, but also from the social. Thus, in this scheme, the child is allowed self-expression through work and integrated community life. In this manner, he achieves social consciousness of duty and discipline.

(E) Training for Citizenship through Work

The rise of modern democracies developed the social tendency in education—which is conceived in terms of citizenship. It equips the individual for service to that society of which he is a member. It is the demand of the modern age that if education is to fit the child to fulfil his role in society, he must cultivate in school the character appropriate to a social being of a Democratic State. He must not only cram political and civic virtues theoretically but must also acquire and assimilate them through purposeful practice. For this, there should be such organization in the school itself, based on mutual help and co-operation. To achieve these objectives, constructive activities, organized on a social basis, are essential. Social training can best be given through such creative labour:

> If mutual help and co-operation are not to be emptied of all their content, the society in school must be engaged in some fruitful creative activity. This is best supplied by the organization of an art or a craft in the school. The value of creative labour as a principle of self-government can scarcely be exaggerated. Here self-government is neither imposed upon the pupils from above nor mimiced by them but grows out of their daily needs and requirements. No art or craft can be successfully practised without a previously settled plan and purpose for which the members of the school have to organize and discipline themselves. The teachers and the pupils have to co-operate in order to bring about the desired results. The labour and the craft principle therefore supplies the greatest impetus to democratic self-government in schools. It also provides opportunities for the cultivation of political and civic virtues under the expert leadership of the teacher.[4]

Thus, creative and constructive manual labour, as principle of education, is psychologically and sociologically

[4] J. B. Kripalani: *The Latest Fad*, p. 65

sound. Gandhiji advocated an educational system based on the principle of constructive labour to build the life of an individual and of society. To achieve this purpose he suggested well-organized and integrated learning through manual work. His concept of integrated learning differed from the concept prevailing in the West.

(F) GANDHIJI'S CONCEPT OF INTEGRATED LEARNING

His concept of the integration of learning differed from that prevailing in the West, wherein integration of learning was being tried through the means of association of ideas. The process was in the form of correlation of different subjects with a core subject of choice or with a purposeful activity meant for the acquisition of knowledge. He did not recommend merely integration of subjects but integration of all kinds of learning through manual labour. He wanted the integration of primary learning, associated learning and concomitant learning of the educand through manual work organized on a social basis and carried out scientifically and in an atmosphere of vision. The idea of correlation of the contents of studies is not new in the field of education. After Herbart, different educational workers stressed this aspect of correlation for the concentration of studies. Naturalism made education child-centred; research in child-psychology brought in interest and active learning, and scientific tendency encouraged experimentation and thus opened up a vast field of knowledge. The new industrial civilization—arising out of the Industrial Revolution—created socio-economic problems, pertaining to labour and other matters and democratic progress gave rise to social questions.

All these different modern tendencies brought about the need for concentration of studies of the curriculum and the technique of correlation as a method to make the process of learning of the educand interesting, practical and effective. Different educationists evolved different techniques of correlation stressing different cores. In the field of basic education Gandhiji suggested that a basic craft be the medium of education together with the other constructive activities of an integrated society. Thus, in the

scheme of basic education, the maxim of educational practice is learning through purposeful living based on constructive labour. Hence, manual labour is the basis of education as well as the medium of the process of correlated learning. This creates a problem of methodology in the field of basic education. Clarifying this point, Acharya Kripalani stated:

> The craft chosen must be learnt systematically and scientifically with a view to efficiency and practical results. It must not be learnt merely as a means either for intellectual work or for economic self-sufficiency. It must be both a means and an end.[5]

The same writer further explaining the technique of correlation in the scheme of Gandhiji states:

> What Gandhiji proposes is to change the medium of instruction. He seeks to alter the character and language through which education is imparted and acquired. It is a change not merely in curriculum and subjects taught but a change in methodology. Labour in his scheme does not stand merely for self-help or school work. It becomes a unifying and integrating factor. It helps to combine intellectual, artistic, scientific and physical development of the pupil. Books and the written word are not however dispensed with but they are to be re-thought, re-invented and re-written by the pupils doing creative work in co-operation with the teacher and one another. This re-thinking, re-creating and re-writing is what Gandhiji calls true education. Education here follows the natural evolution of the individual and the race, the evolution of all knowledge, art, science, philosophy and religion.[6]

Gandhiji's Approach to Education

The principles and the technique of correlation in basic education are in accordance with modern trends in education. No system of education and its practice can be properly appraised and appreciated unless it is studied in connection with the ideas and ideals which inspire it. Thus it becomes essential to know the background and stages of development of ideas and ideals of the sponsor of this scheme, i.e. of Mahatma Gandhi.

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[5] J. B. Kripalani: *The Latest Fad*, p. 78

[6] *Ibid*

Evolution of His Educational Ideas

Gandhiji was both a revolutionary and a constructive genius. Out of his particular philosophy were his views on education evolved. In the beginning, he recommended manual training *cum* literary training, but realizing its impracticability, he recommended literary training through vocational training:

> I had long been impressed with the necessity for a new departure, as I knew the failure modern education had been, through the numerous students who came to see me on my return from South Africa. So I started with the introduction of training in handicrafts in the Ashram school. In fact, extra emphasis was placed on manual training, with the result that the children soon got tired of manual training and thought that they had been deprived of literary training. There they were wrong, for even the little that they gained was more than children ordinarily got in the orthodox schools. But that set me thinking, and I came to the conclusion that not vocation *cum* literary training, but literary training through vocational training, was the thing. Then vocational training would cease to be drudgery and literary training would have a new content and new usefulness.[7]

In South Africa, he took up the work of giving education to his children as well as to the children of his co-workers, as a necessity, on a small scale. The study of literature of Tolstoy and Ruskin influenced him. In his experiments, he introduced manual work, manifested through various useful community activities of the Ashram, along with literary training. Returning to India from South Africa, he took up the problem of national education as a part of the Freedom Movement. National educational institutions were established under his guidance. Through national education, youths were prepared and trained for the struggle of freedom, based on truth and non-violence and for the socio-economic and cultural reconstruction of the people. In their education, manual work, organized on a social basis, was practised along with literary training.

From 1937 onwards, Gandhiji's educational ideas evolved further and he recommended education *through*

[7] M. K. Gandhi: *Basic Education*, pp. 7, 8

a craft. The word 'craft' is symbolic of creative and constructive manual labour, taken on a community basis and practised as the chief medium of education. In his philosophy and practice of education, he synthesized all the modern trends in education. He was an idealist in his aim and a realist in the medium of education. Like a naturalist, he kept the child at the centre and recommended the necessary steps for his all-round harmonious development, and like a pragmatist, he emphasized the social and experimental attitude to evolve a scientific and efficient technique in educational practice. The technique of correlation in basic education is a result of his philosophy of life. As such, different methodological aspects of the technique of educational practice should be understood in context with his philosophy of life. These aspects can be classified as under:

(a) For what purpose is correlation to be practised?
(b) With what is correlation to be realized?
(c) How is the process of correlation to be practised?
(d) What is to be correlated?

In short, the purpose, medium, process and contents of correlation should be understood, keeping in view the ideas and ideals of the sponsor of the scheme of education. This will help the teacher to practise this technique with purpose and understanding.

Purpose of Correlation

Gandhiji believed in the spiritual origin of man and his divine destiny as well as in the immortality of society. Like Pestalozzi and Dewey he looked upon education as an instrument of social change leading man nearer his spiritual destiny. Through education he wanted to reconstruct the educand into new man enabling him to draw out the best in himself, while learning through living a well-organized community life of the school and thereby evolve a just, peaceful, non-acquisitive social order (*Ramarajya*) based on truth, love, justice and co-operative work. In his breadth of vision on education, Gandhiji is truly a seer of this modern age. His genius drew inspiration from India's ancient culture, studied the present as a

realist, and diagnosed the symptoms of the social, economic and cultural degradation of the people. He visualized the future also with a predominant force—labour. On the basis of this *darshan* he tried to reconstruct his scheme of education wherein he synthesized all the forces of the ages.

History has offered evidence of the fact that different ideals have influenced humanity at different stages of its development. These have helped both the individual and the society in moulding their life. As our scriptures have put it, during the Brahmanic age, knowledge was power and the Brahmans who possessed knowledge were respected by the State and society. Afterwards, 'might is right' was the rule of the day and a class of warriors created a civilization peculiarly its own. In the process of evolution, emphasis from 'knowledge' and 'might' was shifted to a third force, 'money'. Moneyed men received honour and respect from the State and society. They managed to dominate different aspects of the life of individuals as well as of society. This gave birth to a struggle for existence. Out of this struggle, many new ideologies sprang up and affected the ideas and life of the people. The consequent struggle gave rise to two world wars within a quarter of a century. A new force of Labour is now emerging all over the world. In our country, Gandhiji had visualized this force. He was a Karma Yogi and wanted to actualize this force in the daily life of the people. For this, he made experiments in his own life as well as in the life of his colleagues and tried to realize the potentialities of his conception of the New Man and The New Social Order. With this end in view he organized the corporate life at many centres in the country on the basis of constructive labour.

He saw that his fellow countrymen suffered from slavery, poverty, disease and ignorance. As a leader of rare genius, guided by the principles of truth and non-violence, he gave a twofold programme to the nation: (a) a fighting programme to fight against the foreign imperialistic and exploiting rule; and (b) a constructive programme to reorientate Indian life on the basis of self-reliance and mutual co-operation. Basic education was

revealed to him as the most potent educative force as a result of his long continuous work for the uplift of the masses. The principles underlying this scheme were calculated to bring about a new silent revolution in our education.

Classes *v.* Masses

He realized the truth that the total effect of the prevailing education of a nation affects the mode of living of its individuals. The effects of education, given by a foreign government, penetrate deeply into the very texture of society. Just like Tolstoy, Gandhiji believed that one of the chief reasons of the manifold troubles of our people was the education given us by an imperialistic and alien government. It had created two groups of people; one, literate and small in number, which tried to exploit the other, illiterate, large and struggling for its very existence. There was no living bond between the two groups of society and those who were literate behaved like foreigners amidst their own countrymen. People were divided into literate classes and illiterate masses. The former strove hard to exploit the labour, leisure and life of the illiterate masses. Consequently, society was divided into two groups, one of 'haves' and the other of 'have-nots'. Gandhiji wanted to remove this disparity through education.

Social Reconstruction through Education

He studied the actual conditions of Indian villages and expressed that his expectations would be realized through education. He said:

My plan to impart Primary Education through the medium of village handicrafts like spinning, carding etc. is thus conceived as the spear-head of a silent social revolution fraught with the most far-reaching consequences. It will provide a healthy and moral basis of relationship between the city and the village and thus go a long way towards eradicating some of the worst evils of the present social insecurity and poisoned relationship between the classes. It will check the progressive decay of our villages and lay the foundation of a juster social order in which there is no unnatural division between the 'haves' and 'have-nots' and everybody is assured of a living wage

and the right to freedom. And all this would be accomplished without the horrors of a bloody class war or a colossal capital expenditure such as would be involved in the mechanization of a vast continent like India. Nor would it entail a helpless dependence on foreign imported machinery or technical skill.[8]

He wanted to establish a just, peaceful, non-acquisitive social order. He was convinced that such an ideal, that of a co-operative society, could never be achieved by platform speeches, lectures, or by politics, but was possible only through the process of a new type of education which would train men and women to play their part in establishing a new social order, and that is the purpose of technique of correlation in basic education.

Individualistic Aims of Education

Gandhiji expressed the social aim of education clearly and definitely. Let us examine his views regarding the type of individuals he expected as a result of basic education. He put his views to those students who had completed their basic education course at Sevagram. In 1946, Shri Aryanayakam, the Secretary of the Hindustani Talimi Sangh,—the central experimental institute of Nai Talim, brought nine boys of the seventh class to meet Gandhiji. The report of this meeting contained the following:

These had all practically completed their seven years' course in the Sevagram Basic School. They were village lads from Sevagram and the neighbouring villages. Compared to those whom one sees working in the fields and who have never been to school, they were a heartening result of a first endeavour. They were clean, well-groomed, disciplined and well-mannered. Gandhiji cracked a few jokes with them which they entered into with merry laughter. One of them had the temerity to ask Gandhiji what type of boys of fourteen he expected to be turned out after a seven years' course at a Basic School. Gandhiji seized the opportunity of telling them that if the school had done its duty by them, boys of fourteen should be truthful, pure and healthy. They should be village-minded. Their brains and hands should have been equally developed. There would be no guile

[8] M. K. Gandhi: *Basic Education*, p. 51

in them. Their intelligence would be keen but they would not be worried about earning money. They would be able to turn their hands to any honest task that came their way. They would not want to go into the cities. Having learnt the lessons of co-operation and service in the school, they would infect their surroundings with the same spirit. They would never be beggars or parasites.[9]

Thus Gandhiji expressed the objectives—the social and the individual aims of his scheme—in simple but clear terms. Now it becomes essential to study the basic elements of his scheme on which he wanted to hinge his new educational structure.

Chief Features and Implications of Basic Education

In selecting the fundamental elements of his scheme, Gandhiji is both a realist and an idealist. He tried to diagnose the causes of the ruin of villages which are the backbone of Indian culture and civilization. He was convinced that the downfall was due to the ruin of village crafts, community life, cleanliness and useful knowledge relating to life and culture. This ruin was brought about by a foreign government—the British. He wanted to revive the basic crafts and the other basic elements through education. Since these elements constitute the basis of his scheme, it is known as basic education.

Village Crafts

Gandhiji came in close contact with the masses of India, and hence became aware of their hardships and downfall. He was convinced that the real India lived in villages as there had been handicrafts and cottage industries in villages, these could be revived and each village made an earning unit. Village people, happily and gainfully occupied, lived a busy and prosperous life. Western civilization and its type of traditional education killed village industries and initiative, with the result that villagers were deprived of remunerative occupations and became poor, idle and miserable.

With the destruction by the British of the ancient village organization and the dumping on the village of goods manufactured abroad,

[9] M. K. Gandhi: *Basic Education*, p. 87

the people of the village became disorganized, lost their occupations, felt helpless and paralysed, and were sinking steadily into poverty, unemployment and despair. The educated looked upon their education as a mere means to their own advancement even at the cost of the poor. Gandhiji saw that the only way of saving the nation at this juncture was to revive village economic life and to relate education to it. Education accordingly, he held, was to be based on village occupations.[10]

Thus he wanted to revive village industries through the process of education to make people self-reliant, prosperous and happy.

Community Life

Indian village people had their own peculiar culture. They managed their own affairs of corporate and socio-economic life. They generally had a joint family system and every village had a village Panchayat consisting of elders of different castes and creeds. They solved their own problems. There was a definite form of community life in every village. Self-help, co-operation, mutual understanding and tolerance were the rule of their corporate living. Under the foreign rule, the community life of the people was neglected, ruined and brought to a standstill. The English rulers introduced a method of education which aimed at developing the individuality of the student, but was unconcerned about the best use to which his developed individuality could be put. Often, it was utilized, not in the service of others, but for exploiting them. Consequently, it gave birth to narrow individualism of all kinds and created mutual strife, disunity and absence of reverence for anybody. Gandhiji wanted to revitalize the community life of the people through education.

Cleanliness

Set amidst natural surroundings, villages formerly were sanitary, healthy and cheerful, but during the last century, they became dirty, disease-ridden and doleful. Gandhiji wanted to revive personal as well as social cleanliness and therefore charted the programme of *safai* for our nation.

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[10] Bharatan Kumarappa: Editor's Note to *Basic Education*, p. iii

Illiterate but not Ignorant

Indian villagers were, perhaps, illiterate, but they were not ignorant regarding the problems of life, whether social, medical, economic or moral, and they possessed much useful knowledge concerning them. Though they might not know how to express this knowledge through a written symbol yet they were not ignorant or uncultured. They had their own values of life, beliefs and conventions. They lived a simple life, were straightforward and honest in their dealings and had reverence for different religions. They had their own way of living which had a distinct culture and character. During the last century, education became more widespread. But it was unrelated to life, given through the medium of either the spoken or written word. It made the student diffident and ignorant about the actual problems of life. Even educated people were ignorant of the rules of health and sanitation, and were unable to solve their socio-economic problems. Gandhiji wished to impart useful knowledge arising out of life and for life.

Formal Literary Education and Its Effects

Gandhiji has described the effects of the modern literary education as follows:

> Today the youth educated in our universities either ran after Government jobs or fell into devious ways and sought outlet for their frustration by fomenting unrest. They were not even ashamed to beg or sponge upon others. Such was their sad plight. The aim of university education should be to turn out true servants of the people, who would live and die for the country's freedom. He was therefore of the opinion that university education should be co-ordinated and brought into line with basic education, by taking in teachers from the Talimi Sangh.[11]

He gives thus a pen picture, in short, of the unhappy strivings of educated youths. What a disparity between the actual results and the results expected out of a liberal education! The fault was in the selection of mere literary study which was unrelated to life; and secondly, in the mere use of words as the medium of education. He wanted

[11] M. K. Gandhi: *Basic Education*, p. 107

useful literary education through manual training, which is known as correlated knowledge.

Contents of Correlation

In the preceding paragraphs the ideals, aims and basic features of Gandhiji's scheme are discussed. They indicate the ideological aspect, but, there is another aspect as well which is the methodological aspect. It is essential to study the basic elements of the scheme as also the ideas underlying those elements, and their organization for the purpose of imparting education. He did not advocate the teaching of the basic elements of the scheme taken separately, but recommended the technique of teaching those elements in a synthesized form. He recommended all-round and integrated learning i.e., Primary, Associated and Concomitant learning through these elements.

Gandhiji tried to formulate a basis for the methodological aspect also. Busy with other problems pertaining to our nation and humanity at large, he could not take up the work of translating his scheme into practical procedure. This resulted in the technique not being correctly understood in all its aspects, and undue emphasis was given to the means and contents of correlation, relegating the objectives of the scheme to the background. In the field of basic education it has been found that, frequently, undue emphasis has been given to one or more of the basic features of the scheme. At times, this creates misunderstanding and difficulties regarding the technique. All the basic features of the scheme, discussed above, should be considered comprehensively along with the basic principles of the scheme. If the basic features are taken as separate entities they have their own worth, but not the worth of an all-round and practical education. Let us discuss this point in detail and with illustrations.

Teaching of the Basic Elements of Education

Crafts

There are village handicrafts and mechanized crafts and there are also craftsmen. As separate entities, they do not serve any educative purpose, though they serve economic and other purposes. Gandhiji realized that mere

craft work resulted only in manual labour and drudgery, and, as such, not in education in the real sense of the term.

Even after ten years of the experiment, in April 1947, while addressing the members of the Hindustani Talimi Sangh at Patna, he said:

> Our system of education leads to the development of the mind, body and soul. The ordinary system cared only for the mind. Nai Talim was not confined to teaching a little spinning and a little sweeping. However indispensable these were, they were valueless unless they promoted the harmonious development referred to.[12]

Gandhiji attached great importance to the educational value of manual labour and craft-training. The same truth is applicable to work-shop schools and craft-biased schools and factory schools. In these schools craft is not the core of education.

Community Life

Community or group life exists in society and manifests itself through many forms, e.g. the joint family system, caste dinners, clubs, meetings, associations, hostels etc. In the crude form, the group life of these institutions does not bear any educative value. It does not promote happy, harmonious and co-operative relations of the members with one another on an educative basis. Individuals of the group do not mix with one another on the basis of love, service and sacrifice. Gandhiji wanted to revitalize community living through education based on love.

Cleanliness

When the effects of the absence of personal cleanliness are expressed in the form of disease, it is assigned to physicians to treat them. In the same way, the work of social cleanliness is assigned to some definite members of society; this has created the problem of social inequality and of untouchability. These persons do their work as a part of manual labour, but the process and the quality of work do not yield any educative value in drawing out the best from the man or woman. The mere work of *safai* does not uplift the doer as such.

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[12] M. K. Gandhi: *Basic Education*, p. 95

Correlated Knowledge

In the West, efforts are made to correlate the knowledge of one subject to the knowledge of others and thus concentrated academic study is pursued. While this method imparted literary knowledge to a learner in an easier way, it did not give the desired results of liberal education, namely, the assimilation of the effects of education and channelizing them into actual day-to-day living.

Culture

Nowadays, talks, lectures, and speeches are arranged for imparting cultural knowledge. Mere talking and listening about culture do not make a listener cultured unless he is helped to live the values of true culture in his day-to-day living through education. Though talks can stir emotions and appeal to reason, it is rarely that the listener is jolted to activity—so as to practise what he has heard. Often, he fails to act according to the needs of life, because while he has heard the talks he has not undergone actually the beneficial day-to-day experiences. Constant practice of true values of life, on an educative basis, supplies the necessary inner force to live a full and rich life. Crafts, creative and constructive manual labour, community living, cleanliness, correlated knowledge—these features exist as independent entities in the world around us. It is the work of basic education to so organize and utilize them as to result in the all-round development of the educand. These factors are an index to the contents of education, as well as to the technique of its practice.

Effects of Correlation

Gandhiji advocated truth and non-violence as the cardinal guiding principles of both the individual and society. He was idealistic in his aim of education. Truth requires keenness on the part of an individual to know truth and to live accordingly. Non-violence requires consciousness of one's own individuality and respect for it, as well as equal regard and reverence for the individuality of others. This attitude should be fostered in children by teachers exemplifying it in their own mode of living and thus setting the tone of the school.

Truth-searching attitude and a constructive outlet for the energies of children should be encouraged by well-organized day-to-day living conditions in the school. The organization, atmosphere, and the working of the whole school community should be based on these values. The constant practice of these values in an ideal atmosphere gives a peculiar stamp to the behaviour of children. They will actively contribute to the reconstruction of a new co-operative social order of Gandhiji's conception. Herein lies the truth of education for life and through life. He wanted to reconstruct the whole being of an individual as well as of society on the basis of the chief elements of his scheme, which are to be executed in the process of education in an atmosphere of truth and non-violence. The same basic features of craft, community life, cleanliness, knowledge and culture can be administered in an atmosphere other than that of truth and non-violence also. But his peculiar genius is manifested in his specific recommendation of truth and non-violence for the creation of New Man and New Social Order through the process of education the structure of which is evolved on the basic elements discussed above. In the school, children are not merely told to do particular things, but are actually required to experience the basic elements and to live the cardinal values of life.

This was not an Utopia to Gandhiji but a natural consequence of an educational scheme planned and executed in the right spirit. He himself witnessed the patterns evolved from the traditional type of western education imparted to our countrymen. They fulfilled the expectations of the originators of that particular form of education. What is required is that the methodological aspects should be properly planned, organized and executed to realize the ideological aspects of a scheme. From this point of view, after presenting the scheme to the nation, he tried to give his best to the methodological aspects, and regretted that he could not give himself wholly to this mission and entrusted the experiment to be worked out in detail to those whom he trusted:

I regret that I woke up to the necessity of this at this very late age. Otherwise I should have made the experiment myself.[13]

He wanted the all-round development of a child to take place through the practical training of a vocation. He wanted to give children, from the very start, practical training in vocations. By this process, children become creative units from the beginning, and earning units at the end of schooling. By practical training, children develop ingenuity and skill which enable them to have more experiences and make them eager to assimilate more necessary knowledge. Off and on he recommended takli craft because he was conversant with it. Otherwise he was open-minded for the selection of a particular craft to be made a medium of education.

His Views regarding Selection of Crafts

I should lay down no hard and fast rule. Experience in such matters would be the best guide. The capacity of various crafts to become popular, their ability to draw out the faculties of the student, should be studied. The idea is that whatever craft you choose, it should draw out the faculties of the child fully and equally. It should be a village craft and it should be useful.[14]

In the selection of crafts, he emphasized the educative potentialities and usefulness of crafts for village reconstruction. He wanted a child to learn the art and science of all the processes of the craft, but he did not mean that a child should do a craft mechanically:

I hold that the highest development of the mind and the soul is possible under such a system of education. Only every handicraft has to be taught not merely mechanically as is done today but scientifically, i.e. the child should know the why and the wherefore of every process. I am not writing this without some confidence, because it has the backing of experience. This method is being adopted more or less completely wherever spinning is being taught to workers. I have myself taught sandal-making and even spinning on these lines with good results. This method does not exclude a knowledge of history and geography. But I find that this is best taught by transmitting such

[13] *Harijan*: 18-9-1937

[14] *Ibid*, 4-3-1939

general information by word of mouth. One imparts ten times as much in this manner as by reading and writing. The signs of the alphabet may be taught later when the pupil has learnt to distinguish the wheat from the chaff and when he or she has somewhat developed his or her tastes. This is a revolutionary proposal but it saves immense labour and enables a student to acquire in one year what he may take much longer to learn. This means all-round economy. Of course, the pupil learns mathematics whilst he is learning his handicraft.[15]

The Place of Literary Education

He valued the learning to letters also, but in its proper place and time:

Literacy is not the end of education nor even the beginning. It is only one of the means whereby man and woman can be educated. Literacy in itself is no education. I would therefore begin the child's education by teaching it a useful handicraft and enabling it to produce from the moment it begins its training.[16]

He was of the opinion that education should be started with the teaching of a craft. A child likes 'doing' instinctively, and, along with it, certain general knowledge should be given orally. He wanted to make the child, from the very commencement of education, do something productive and useful and, also make him keen to know about his surroundings, and take intelligent interest in the affairs happening around him.

The Place of Character Building

The years of childhood are formative years. Therefore, he gave priority to character training in education and not to mere literary training. He wanted the correlation of habit formation through creative manual labour as a process of elementary education:

I have not run down the knowledge of letters in all circumstances. All I have now shown is that we must not make of it a fetish. It is not our Kamadhuk. In its place it can be of use and it has its place when we have brought our senses under subjection and put our ethics on a firm foundation. And then, if we feel inclined to receive that

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[15] M. K. Gandhi: *Basic Education*, p. 31

[16] *Ibid.*, p. 31

education, we may make good use of it. As an ornament it is likely to sit well on us. It now follows that it is not necessary to make this education compulsory. Our ancient school system is enough. Character building has the first place in it and that is primary education. A building erected on that foundation will last.[17]

Without conscious directive efforts for habit formation, there is every chance of the misuse and overuse of knowledge of letters, received formally, without the backing of the constructive experiences received under the guidance of a suitably qualified, able and loving teacher.

Drawback of the Word-centred Method of Teaching

While selecting other contents, Gandhiji gives importance to constructive activities and not to mere words. Mere knowledge of letters regarding useful activities of life makes children talkers:

A lot of time is wasted in our schools by ignoring the elementary principle of learning by doing. Our usual method of teaching the prescribed syllabus of personal and community cleanliness and hygiene is a glaring example. The children are told what to do in words; they can, perhaps, reproduce these words; but they do not do, and so they do not learn; the theory is never carried into practice.[18]

From the very beginning, Gandhiji wanted attitude formation and habit formation, not through verbal knowledge, but by constant practice of constructive and socially useful activities in a school to enable pupils to be self-reliant and socially useful. Under the guidance and supervision of a teacher, through actual doing of activities and through actual living in the community life of the school, he wanted them to understand the principles of sanitation, hygiene, nutrition, self-help and service, making it second nature to the children. For this, the corporate life of a school, manifested through well-organized useful activities becomes the medium of correlation of habit formation. During the formative period, he advocated, not preaching of virtues, but their actual practice through socially useful activities of the school. This is the fundamental and primary

[17] M. K. Gandhi: *Basic Education*, p. 4

[18] Marjorie Sykes: *Basic Education—Its Principles and Practice*, p. 2

correlation of his conception. Here is a clue to his views of correlation. He wanted to remove disparity between knowledge gained at the school and actual living of the child. Making a child self-reliant, conscious of possessing ability to help himself and solve his problem was a real education to him. "Why did he not lay any stress on religious instruction?" he was once asked. He replied, he was teaching them practical religion, the religion of self-help.

Self-sufficiency

Self-sufficiency, which is the acid test of his scheme, is not the be-all and the end-all of his scheme, but is a natural result of a well-managed and purposeful basic school. There is no mercenary motive but an educative motive in the idea of self-sufficiency:

> If such an education is given, the direct result will be that it will be self-supporting. But the test of success is not its self-supporting character, but that the whole man has been drawn out through the teaching of the handicraft in a scientific manner. In fact, I would reject a teacher who would promise to make it self-supporting under any circumstances. The self-supporting part will be the logical corollary of the fact that the pupil has learnt the use of every one of his faculties. If a boy who works at a handicraft for three hours a day will surely earn his keep, how much more a boy who adds to the work a development of his mind and soul?[19]

Thus constructive manual labour, be it in the form of a craft or *safai* or any socially useful activity of the community, taken as a process of education, becomes a medium of correlation. A child does manual work at home also, but he does it as mere work, not as a medium of his education. It is the scientific and social atmosphere of the school that makes work the basis of integrated learning of the child enabling him to add his mind and soul to the work.

Literary Training

This leads us to the question of knowledge of letters and of literary training through vocational training. Gandhiji has rightly said in a concise statement that it will give a new content and new usefulness to literary training given

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[19] *Harijan*, 11-6-1938

through vocational training. A child learns the art of handicrafts by primary learning, but simultaneously he has to learn the science of handicrafts also. He has always stressed vocational training in the context of why and wherefore of the processes with a view to teaching handicrafts in a scientific spirit. A child gets experiences while learning different processes of handicrafts and a teacher has to enrich his experiences and understanding by associating useful and necessary information. The process of associated learning, through the technique of correlation, in basic education answers the problem of learning of letters and of intellectual development. Gandhiji was never against literary training and intellectual development, but he had his own views of methods of imparting this kind of associated learning through the medium of a basic craft. He was not against literary training, but he was against the traditional method in which mere academic information was given and hasty efforts made to impart training of reading and writing which hampered the growth of a child. He wanted correlated literary training. He put the idea to educationists that correlated literary information bears new contents, being related to life. It has utility and the method is natural, effective and scientific.

Intellectual Development

Just as Gandhiji had his own views regarding the contents, the method and aims of correlated literary learning of a child through a craft, he had his own views regarding the intellectual development of a child through vocational training. Concerning this aspect also, he expressed his own views regarding the medium of intellectual development, and the method and the process of developing it. He recommended the educative use of the intellectual powers of a child.

The Medium of Intellectual Development

In 1946, while addressing the post-graduate and other trainees of the All-India Basic Training Centre at Sevagram, Gandhiji said:

> One of the complaints that has been made by one of you, is that too much emphasis is laid here on manual work. I am a firm

believer in the educative value of manual work. Our present educational system is meant for strengthening and perpetuating the imperialistic power in India. Those of you who have been brought up under it have naturally developed a taste for it and so find labour irksome. No one in Government schools or colleges bothers to teach the students, how to clean the roads or latrines. Here, cleanliness and sanitation form the very alpha and omega, of your training. Scavenging is a fine art, you should take pains to learn. Persistent questioning and healthy inquisitiveness are the first requisites for acquiring learning of any kind. . . . Inquisitiveness should be tempered by humility and respectful regard for the teacher. It must not degenerate into impudence. The latter is the enemy of the receptivity of mind. There can be no knowledge without humility and the will to learn. Useful manual labour, intelligently performed, is the means *par excellence* for developing the intellect. One may develop a sharp intellect otherwise too. But then it will not be a balanced growth but an unbalanced, distorted abortion. It might easily make of one a rogue and a rascal. A balanced intellect presupposes a harmonious growth of body, mind and soul. That is why we give to manual labour the central place in our curriculum of training here. An intellect that is developed through the medium of socially useful labour will be an instrument for service and will not easily be led astray or fall into devious paths. The latter can well be a scourge.[20]

In this address, he justified the educative value of socially useful labour and its use as a medium of intellectual development.

In dealing with the aspect of correlated intellectual development, he was more idealistic, stressing the method and medium of developing the intellect and the purpose for which it was to be used. He was fed up with the efforts made in orthodox schools for intellectual development and criticized them. In those schools, teachers stuff the minds of children with various types of information classified into different subjects in the name of intellecual development. While imparting oral bookish information, they do not take into consideration the physical and mental age of the child, his innate tendencies, aptitudes and calibre. They feel satisfied that they have finished the course

[20] *Harijan*: 8-9-1946

of studies during the prescribed period of the year and remain content that they have done their duty. Under the pressure of necessity of passing the traditional system of examination, pupils cram information and stuff their minds with all kinds of information of an academic nature. This process is unnatural and unscientific and the result is not development of intelligence or of any other faculty but dissipation of the abilities and energy of the pupils.

Gandhiji was very critical about this state of things and while criticizing it, he said:

> As to the necessity and value of regarding the teaching of village handicrafts as the pivot and centre of education I have no manner of doubt. The method adopted in the institutions in India I do not call education, i.e. drawing out the best in man, but a debauchery of the mind. It informs the mind anyhow, whereas the method of training the mind through village handicrafts from the beginning as the central fact would promote the real, disciplined development of the mind resulting in conservation of the intellectual energy and indirectly also the spiritual. Here too, I must not be understood to belittle fine arts. But I would not misplace them. Matter misplaced has been rightly described as dirt. In proof of what I am saying, I can only cite the tons of worthless and even indecent literature that is pouring in upon us with the result which he who runs may see.[21]

> We have up to now concentrated on stuffing children's minds with all kinds of information, without ever thinking of stimulating and developing them. Let us now cry a halt and concentrate on educating the child properly through manual work, not as a side activity, but as the prime means of intellectual training.[22]

In this statement, he makes it very clear that the mere process of stuffing children's minds with all kinds of information does not necessarily develop their intelligence. He gives importance to the process of stimulation and development of intelligence, and that too through manual work taken as the prime means of intellectual training and not as a side activity as is done in some schools.

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[21] M. K. Gandhi: *Basic Education*, pp. 14, 15

[22] *Ibid*, p. 38

The Process of Correlation

He showed a general procedure of correlating literary training through a craft. He would have liked to work out the details and to evolve a scientific technique of correlation, but owing to the pressure of work, he had to entrust this work to teachers and educationists. He was very clear about the efficacy of this method, but was fully conscious of the fact that the technique is not still fully evolved but is to be evolved. For this reason, regarding the procedure to be adopted for the process of correlation, he kept an open mind and experimental attitude, and advocated a scientific spirit in which to work out its technique — to make the process natural, scientific and fruitful. He was idealistic regarding the aim of the scheme, but was pragmatic regarding the method of its procedure. He emphasized the necessity of preserving an experimental attitude to evolve a scientific technique of correlated teaching. To make the process of correlation natural, the essential things required, according to him, are as follows:

(a) Resourcefulness of a teacher;

(b) Experimental attitude of a teacher towards the work of correlated teaching;

(c) Necessity of keeping records of work done on a scientific basis;

(d) Co-operative efforts of teachers to exchange their experience and to find a technique of correlated teaching.

Gandhiji being an idealist always stressed the concomitants or attitude — learning processes, be it craft training, literary training or intellectual development through vocational training.

In the scheme of basic education this type of learning at every stage is emphatically stressed to mould the future living of the educand through his present living. Gandhiji had seen the futility of the methods of imparting mere oral literary training in the name of education. It neither creates interest and motivation of a learner, nor does it develop mental faculties or attitudes. Its effects do not penetrate into the actual day-to-day behaviour of a child and hence knowledge becomes burdensome. The child

cannot reshape his mode of actual living as a result of that oral literary training; he merely possesses information which, often, does him more harm than good. A child, learning the principles of hygiene and sanitation in a class-room in the period of science, is not inclined to eschew purchasing dirty sweetmeats, vended by a hawker on the roadside. What a disparity between the normal knowledge received and the process of actual living! Gandhiji advocated concomitant learning with regard to any basic element, utilized as a medium of correlation. He did not advocate literary training of a formal and academic nature, but advocated correlated literary training achieved through work:

> How far learning can be done in terms of words and yet be applied in situations where more than the recall of the words is necessary, is another problem which has received study. At one time the oral learning of rules, principles and directions occupied the major part of the pupil's school day. Educators failed to take account of the fact that even when oral directions for doing something are directly in front of one and do not have to be remembered they are often difficult to follow in performance. That one learns to do by doing is now an accepted principle though not fully adhered to in all schools.[23]

How much one can learn to understand without doing and experiencing is a problem to which Gandhiji gave much thought before stating that mere oral literary training does not develop understanding and enrich attitudes because it has not the foundation of doing and active experience.

The function of education is to enable the child develop through a proper and harmonious combination of the development of heart, hand and head, so that he will grow into a well-integrated, well-adjusted individual — the result of correlated knowledge. In a school, a child is set some useful occupation. But, this does not mean that he is receiving a good education. Gandhiji has said that for a child's education, in connection with an occupation, a thorough and comprehensive knowledge, relating to the theory of the various operations which he has to perform, and the use and construction of the tools which he would

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[23] *Encyclopedia of Modern Education*, p. 448

be wielding, is to be explained. He is very definite about the necessity of correlated knowledge.

Selection of the Medium of Correlation

Though an idealist in aims of education, Gandhiji was a realist in the selection of the medium of education and he kept to his belief. While discussing the matter with Dr. John De Boer, who was in charge of educational institution in South India, he said:

> If by abundance you mean every one having plenty to eat and drink and to clothe himself with, enough to keep his mind trained and educated, I should be satisfied. But I should not like to pack more stuff in my belly than I can digest and more things than I can ever usefully use. But neither do I want poverty, penury, misery, dirt and dust in India.[24]

Thus we see that he was very critical of the prevailing conditions in India. He wanted to raise the standard of living of every man, woman and child and he wanted to make every one capable of attaining the minimum needs of life through the process of education, and therefore, like a realist, he recommended craft as the medium of education. As an educationist, he assigns new terminology and gives new meanings to common words, particularly to the medium of education through craft. In dealing with this aspect, he assigns new symbols of values to craft material:

> Mediaeval times may have been bad, but I am not prepared to condemn things simply because they were mediaevel. The spinning wheel is undoubtedly mediaeval, but seems to have come to stay. Though the article is the same it has become a symbol of freedom and unity as at one time, after the advent of the East India Company, it had become the symbol of slavery. Modern India has found in it a deeper and truer meaning than our forefathers had dreamt of. Even so, if the handicrafts were once symbols of factory labour, they may now be symbols and vehicles of education in the fullest and truest sense of the term.[25]

Thus he gives an idealistic touch to the realistic medium of education. The important aspects, regarding

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[24] *Harijan:* 12-2-1938

[25] M. K. Gandhi; *Basic Education*, pp. 63, 64

the technique of correlation in basic education, discussed above along with the authentic views of Gandhiji, can be summed up as follows:

(1) THE MEDIUM OF CORRELATION

It is the socially useful manual labour of the educand which should be used as the process of education. Gandhiji emphasized realistic, nationalistic and idealistic trends in deciding the medium of correlation.

(2) THE CONTENTS OF CORRELATION

Through the process of education the educand has to acquire habit formation, useful skills, desirable attitudes, useful knowledge and intellectual development. He has to acquire the contents of study through actual living organized on a community basis. Gandhiji advocated integrated learning through work. He is idealistic and naturalistic in deciding the contents of education to be correlated with work.

(3) THE PROCESS OF CORRELATION

The method respects the innate nature of the educand and as such, it is education which is natural, and psychologically correct. Regarding the process, like a pragmatist, Gandhiji recommended an experimental attitude to evolve a scientific and technical procedure to be adopted to practise the technique in day-to-day work. He did not encourage an artificial or unscientific process of correlation.

(4) THE PURPOSE OF CORRELATION

This leads us to the question of philosophy and objectives of basic education. In this, Gandhiji is definitely idealistic. By a process of education through village handicrafts, he wanted the harmonious all-round development of a child so as to make him into a 'New Man' which in turn, would create a 'New Social Order' based on truth, non-violence, justice and co-operation. He encouraged the individual as well as the social aims of education. He wanted to infuse radically new values of life and social culture through education and for that, he advocated re-orientation of the contents of study and methods of

imparting those contents in context with the ideological basis of the scheme.

To many, basic education and the Project Method appear to be similar and it will be in the fitness of things to have a critical review of the views of Gandhiji and of John Dewey, both being the great educational thinkers of modern time:

Though each developed his philosophy independently of the other, it is small wonder that they reached similar conclusion on basic principles, methods and contents of education. Both were averse to being arm-chair theorizers or rostrum educationists; they worked out their theories in the class-room.

According to Dewey, the present organization of the school does not correspond with the organization of society and the needs of the time. Each individual, he said, should be capable of self-respecting, self-supporting and intelligent work, and each should make a living for himself and those dependent upon his efforts. . . . Gandhiji also envisaged the idea of a co-operative community, in which the motive of social service would dominate all the activities of children during the plastic years of childhood and youth. Both Dewey and Gandhiji conceive of education not merely in terms of learning, but in terms of construction, use of tools, contact with nature, expression and activity. For them the school is the place where children are learning by doing rather than listening; they are learning life by living life. Its primary business may be said to be to train children in co-operative and mutally helpful living. The virtues of such a school are learning by doing, the use of muscles, sight and feeling, as well as hearing and the employment of energy, originality and initiative.

Despite so many points of contact between the two great philosophers, there is a fundamental difference between the two. Dewey is judged to have underrated the wisdom of the ages and to have blundered badly in dismissing the reality of absolute or objective truth, for his philosophy of life and education was at bottom pragmatic. Gandhiji believed in absolute values and objectivity of truth. His philosophy of education is naturalistic in its setting, idealistic in its aim and pragmatic in its method and programme of work. In Dewey's philosophy, pragmatism is fundamental; in Gandhian philosophy, idealism is fundamental and naturalism and pragmatism are merely contributory.[26]

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[26] *Journal of Education and Psychology*, Baroda: July 1952, Editorial Notes, pp. 45, 46

The idealism of Gandhiji gives a peculiar significance to ideological as well as methodological aspects of the scheme. In actual practice, stress has been laid on the medium and contents of correlation. Objectives based on idealism are not attended to adequately and properly. Moreover, Gandhiji gave a very clear and definite ideological basis to his scheme, but he could not evolve a scientific technique of correlation of educational practice, and, as a result of it, educational workers and thinkers interpreted the technique of correlation in their own ways, and this became a basis of misconceptions resulting in difficulties and shortcomings which affected the very process of education of the educand. These misconceptions along with their reasons and effects are discussed in the following chapters with a view to getting a clear and definite concept of the technique of correlation in basic education.

CHAPTER V

ADOPTION OF THE CONCEPT OF CORRELATION

The Scheme in Practice

During the initial and preparatory period, the technique of correlated teaching was in process of evolution. The Zakir Hussain Committee recommended the process of correlated teaching and teachers were confronted with new difficulties and problems. Even Gandhiji was aware of the shortcomings in its practical aspect. He expounded the ideological aspects of the scheme, but was unable to give the exact technique of correlation for he seemed to have realized the difficulty. In his first meeting with the members of the Talimi Sangh in 1944, after his release from detention, Gandhiji said that he knew clearly enough what was to be done, but he did not quite know *how* it should be done. In the absence of his expert guidance regarding the methodological aspects, teachers interpreted and practised the technique of correlation, each in their own way, and thus created fresh difficulties. This was realized by Shri Rajagopalachari who said:

I must qualify as an ideal teacher myself before I start training teachers. Teaching is also a very important craft, and just as we educate through the craft of spinning, I should like to educate through the craft of teaching also. A normal school would come into being by and by. What I am keen on is being a teacher myself. It is a pity that Bapu, having given this revolutionary idea to the world, could not put it into effect himself. He should have been free to establish a school himself and give his system a full trial. He would then have been able to perfect the system. But today a number of half-baked people have taken up the thing. They are simply carrying out the letter of his teaching with the result that they copy his mistakes also. The idea is so original that its practice is obviously beset with difficulties, and every one who has a passion for teaching must make the idea his own and give it a trial after his own fashion and his own mind's bent. That is why I am looking forward to such an opportunity.[1]

Misconception regarding the Medium of Correlation

Gandhiji advocated education through the teaching of a craft. By education he meant the drawing out the best, a student had through the right sort of education. He wanted craft to be the medium of education and not merely a means of imparting academic information on different subjects. He advocated integrated learning, including all its aspects, through the learning of a craft. He gave priority to character training—to be given not through 'talks' but through 'work' of the school. His insistence on the aspect of self-sufficiency as the acid test of the scheme, indicates how keen he was about children learning a craft when in primary school. The eagerness to learn and a thorough mastery of a craft leads to self-sufficiency. While advocating literary training through vocational training, he did not advocate one type of learning at the cost of another, though in actual practice this often happened, as much importance was given either to the primary learning of craft processes or to the associated learning of academic contents along with the craft processes. Consequently, concomitant learning was neglected. In practice, there

[1] H.T.S.: *One Step Forward*, pp. 12, 13

was not the type of integrated learning as suggested by Gandhiji.

During those years, the idea of education through a craft gained favour in the educational world because a dynamic personality like Gandhiji had suggested it. Therefore, teachers began to work with a craft but their interpretation of the scheme was necessarily limited. It meant to them takli spinning, because it was practised by Gandhiji. While he and the other members of the conference used the word 'handicraft' in a broad sense, teachers not only limited its meaning to takli spinning, but also interpreted the process of education in an orthodox sense, that is, the mere imparting of knowledge of three R's, along with the process of a craft. Teachers were unable to visualize the process of education as synthesized process of drawing out the best from the educand, as was visualized by Gandhiji. In the actual day-to-day practice, the technique of correlation was interpreted to be a process of linking together, joining together or putting together information of different subjects of the syllabus with a process of a craft and, that too with takli spinning. Gandhiji meant education through a craft, but owing to wrong understanding in actual practice, teachers tried to impart mere academic information of all types, not *through* a craft process, but *along with* a craft process either in a natural way or in an artificial way. Thus, the technique of correlation was practised in actual day-to-day schooling as a process of imparting information of all subjects with a craft process. The reason for this misconception was clear.

Change only in the Means of Academic Learning

Gandhiji was clear in his conception of education, but the minds of many people who were busy in translating the scheme into practice, were saturated with 'subject teaching'. Their approach was subject-wise, and education to them was mere literacy. As such, it was not a radical change in the medium of education, but simply a change in the means of imparting academic contents. Before this scheme became current, a teacher gave ten fruits or ten play-toys or ten things to a child to make him count ten; now, a teacher

makes a child gin cotton to count ten cotton-seeds or spin on takli ten rounds for counting up to ten. To the teacher, not the craft process, but the academic teaching was important. He made the child learn a craft because he wanted to teach him certain academic subjects. As such the craft process was used, not as a medium of learning, but simply as a means of academic instruction. Thus, in actual practice, a teacher simply changed the teaching aids, in the form of craft-materials or craft processes for imparting academic knowledge. His mental attitude was not changed as he still placed importance on the process of imparting the three R's and not on the teaching of a 'craft'. Importance was given to associated learning and not to primary and concomitant learning—to be imparted through a process of craft training. For example, he brought cotton, cotton-seeds, slivers, a takli and other craft materials with which literary and academic subjects could be linked together naturally or even in a forced way. He did not mind creating a felt need in a child to acquire literary knowledge as is done in the Project Method. As a matter of fact, there was no necessity for a felt need for his method of correlated learning, but there was a felt need on the part of a teacher to demonstrate that in class teaching he could present every thing, in a correlated way; that is, information could be taught in relation to a craft process. This he did because the syllabus required it.

Types of Correlation—Multilateral, Unilateral and Co-lateral

Teachers had to receive training in practice teaching work of correlated units during their period of training. Each pupil-teacher had to conduct a full half-day session of the school for practising a correlated unit. He had to teach half a day, i.e. about four or five consecutive periods. This compelled members of the staff of a training institution to guide the pupil-teacher in such a way that he preferred to link information of as many subjects as possible with craft processes.

Process of Multilateral Correlation

A pupil-teacher in his process of teaching, saw that the pupils took part in an activity or a sub-activity of a craft,

and after it, tried to link information of different subjects on the basis of association of ideas. Unfortunately, the ability and efficiency of a pupil-teacher, under training, was also judged in terms of his capacity to correlate the maximum amount of information of as many subjects as possible with a craft process. If he could correlate information of more than one subject with a craft process, his correlation was taken to be a multilateral correlation. In unilateral correlation, one item of curriculum is correlated with one activity or one incident. In colateral correlation, action and knowledge are simultaneous.

An illustration will make the point clear. A pupil-teacher made children spin on a takli (craft); subsequently he made them count the rounds of yarn spun by them (arithmatic); then he tried to teach a poem about a takli (language); children prepared slivers for spinning cotton, and the pupil-teacher tried to give information regarding the cotton-growing areas of Gujarat (geography); then he tried to describe varieties of takli and gave the history of the evolution of takli (history), and then he made pupils draw a picture of a cotton plant and a takli (drawing).

In the illustration cited above, a pupil-teacher tried to correlate academic contents of about five different subjects of the syllabus with the craft process to takli spinning. In the beginning, there was a tendency to achieve this type of multilateral correlation to its maximum limit. Often the teachers tried to correlate items of all the subjects with the process of a craft. They felt happy that they were able to correlate many of the subjects with a craft, achieving inter-correlation of subjects. They did not care whether correlation was achieved naturally or artificially, and at the cost of learning of the child. Their only aim was to justify that all knowledge could be presented in a correlated way with a craft.

Effects of Multilateral Correlation

Let us examine the type of learning achieved by children under the process of multilateral correlation. The teacher created neither the atmosphere nor the mental background or motivation necessary for learning the craft processes as well as for gaining information, skills and

habits. Children had to do a craft activity, not as their own planned and motivated activity to achieve their desired goal, but because the teacher wanted it to be done—to show correlation of academic subjects. Even in the case of acquiring information, children were not encouraged to learn actively but had to listen to all types of information or ideas presented by the teacher in connection with the craft processes. They had to receive them, not as a felt need to understand or to do a craft activity, but as a felt need of the teacher to justify his process of multilateral correlation. Thus, both activity and academic learning were thrust upon the children. In the orthodox system, information was forced upon children, but that was systematically done. In the process of multilateral correlation, children had to bear the burden of craft processes along with the burden of listening to various types of loosely connected information.

Even academic teaching in this process of multilateral correlation was unscientific as it was given only once along with the teaching of a craft process. There was no systematic drill work, revision and review work to understand the knowledge so imparted. In actual practice, academic information was merely heard by the children, but not assimilated in the form of creative knowledge of three R's. These were the results of far fetched multilateral correlation. If the technique of correlation is properly presented, children should receive education in a natural way—with interest, purpose and active efforts. In the process of multilateral correlation, there was artificiality, a lack of interest and active effort on the part of children, and hence the teacher and the taught felt the strain, and the result was waste and drudgery.

Misconceptions regarding multilateral correlation led to the notion that all knowledge of all subjects is to be presented to a child only through craft-processes. The very type of presentation of the syllabus prepared by the Zakir Hussain Committee also played a part in evolving this type of correlation. The syllabus was not evolved on the strength of records and interpretations of day-to-day experiences of work with the children in schools. It was hypothetical.

Objectives and suggestions befitting the needs and ideals of the nation were mentioned in the syllabus, but it was presented in the form of different subjects. The method of correlated teaching with craft was given on hypothetical grounds. Though it was pointed out specifically that the nature of the syllabus was tentative, and open to modification, yet teachers followed the letter of the syllabus rather that its spirit—as is the common tendency. They divided the basic syllabus into two parts—one of the craft to be taught, and the other pertaining to academic subjects. Thus, in actual practice, they ignored the objectives of the syllabus. The Committee recommended the technique of correlation in basic education to achieve the objectives of the scheme, while in reality the process of correlation was used by the teacher, not as a means of achieving the objectives, but as an end in itself.

Craft-centredness and Its Effects

Another error was to correlate academic knowledge with craft only, thus neglecting the other environments of a child. At the initial stage, teachers tried to correlate all the academic subjects of the syllabus with craft processes only. There was undue emphasis on the craft-aspect, neglecting the aspects of social and physical environments of a child, as a medium of correlation. Though there was definite instruction in the syllabus to give education through a craft, and through the other social and physical environments of a child, yet craft was used as a means of learning. It is felt that two different trends of thought prevailed even in the minds of the members of the Zakir Hussain Committee regarding the emphasis of centres of correlation. Some members over-stressed the medium of the craft and recommended the correlation of all knowledge with the craft. To them, the economic aspect of a craft leading to self-sufficiency in education was important, while to other members the educational and psychological aspects of the craft as well as of the environments of the child were important. The former recommended the craft to be the only basis of education making the process of correlation craft-centred, while the latter recommended the genuine life situations of the child to be the basis of correlation, stressing the need

of making education child-centred. For this purpose, the recommendations of the committee are worth studying as they are of educative value:

> In order to work out an effective and natural co-ordination of the various subjects and to make the syllabus a means of adjusting the child intelligently and actively to his environments, we have chosen three centres intrinsically inter-connected, as the foci for the curriculum, i.e. the physical environment, the social environment, and craft work, which is their natural meeting point since it utilizes the resources of the former for the purposes of the latter. . . . It is essential for all teachers and educational workers to note that we have really attempted to draft an "activity curriculum which implies that our schools must be places of work, experimentation and discovery, not of passive absorption of information imparted at second-hand. As far as the curriculum is concerned, we have stressed this principle by advocating that all teaching should be carried on through concrete life situations relating to craft or to social and physical environment, so that whatever the child learns is assimilated into his growing activity.[2]

Though the committee recommended all three centres of correlation, yet it is ironical that in actual practice, for many years, only the craft-core was stressed and that too as the only medium of correlating knowledge of all academic subjects, and not as a medium of integrated learning. Owing to the neglect of two of the centres and of striving to correlate all knowledge of all the subjects to a craft process, different types of correlation came into existence and difficulties were experienced by both the teachers and the taught. These were expressed even as far back as 1939 when the first Basic Education Conference was held at Poona.

The root cause, as has been already mentioned, was craft as the only medium of correlation of academic subjects, neglecting the other two centres of correlation. The craft-core of correlation in basic education was influenced by the writings and philosophy of Gandhiji and his emphasis on the craft-core had as its basis the socio-economic environment of the villages of India. Gandhiji gave equal importance to every type of learning, yet, in actual

[2] H. T. S.: Zakir Hussain Committee's Report, pp. 49, 50

practice, some workers made craft a subject of primary importance relegating literary training into the background. They could not appreciate the synthesized approach of Gandhiji and hence stressed only the aspect of craft training.

Poona Conference of Basic National Education, 1939

Shri K. G. Saiyidain, the President of the first Conference of Basic National Education, Poona, held in October 1939, clarified this point as follows:

> The crux of the issue was: Should they look upon the craft as primary and the teaching of knowledge which would be useful for the betterment of the child's personality as secondary? He personally felt that the Wardha Scheme was apt to be somewhat nullified if they were so to emphasize the craft as to neglect other important aspects. The most useful way in which they could approach the problem was to look upon the craft as a medium of education for the fullest development of the personality of the child. The teacher had to visualize what knowledge to nurture. He should not content himself with making the child a craftsman but should try to fit him to enter the kingdom of heaven and to be a good citizen of his country and of the world.[3]

The President made these observations like an educationist stressing the process of correlation to enable the child to develop his full personality. He emphasized the moral and social aim of education. In short, while practising the technique of correlation in basic education, efforts were of different sorts. Some emphasize the aspect of craft, making education craft-centred, while others emphasized subjectwise teaching in relation to craft processes. Both yielded to artificiality in the process of correlated teaching. One school of thought stressed craft training with less literary training and concentrated on achieving self-sufficiency. The other, whose approach was subjectwise, spoiled the possibilities of craft training because they undervalued the educational potentialities of craft as the medium of education. Also, they did more harm than good to literary training, because their presentation and treatment

[3] H. T. S.: Zakir Hussain Committee's Report, p. 116

of this aspect of education were not methodical and psychological. Gradually, there was a trend towards multilateral correlation. Ordinary teachers had a literary bias and they tried to drag craft into the teaching of literary subjects. In actual practice, the craft processes could not yield sufficient opportunities for correlation of all the academic contents of the syllabus for the whole of each day. This left the teachers puzzled.

On one side, there was this notion of correlated knowledge, while on the other side, the medium of teaching was only the craft, which could not open up sufficient avenues for imparting knowledge of all the subjects of the syllabus. Besides, there were no text books to guide the teachers. In these circumstances, it was but natural that teachers were puzzled. It was unanimously expressed in the first Conference at Poona, that everyone experienced difficulty in teaching social studies through craft processes, though mathematics, science and language could be taught in a correlated manner with craft. Even then, in this kind of teaching, many teachers taught arithmetic in terms of the craft processes, or set easy subjects for oral or written work related to the craft activity, and thus achieved artificial and forced correlation.

The artificiality of the process of forced correlation did not worry many teachers because they were over-enthusiastic to prove that their process of teaching was a correlated one. But there were others who tried to refrain from the artificiality of correlated teaching and preferred to leave out such academic subjects as could not be related to a craft in a natural way. They were happy to preserve naturalness, but leaving out certain subjects of the syllabus caused them anxiety. This was expressed by one teacher to Gandhiji in 1939. He realized the difficulties of the experimenting stage. He preferred omission of topics to their forced correlation with the craft during the experimental stage, and advocated an experimental attitude, openness of mind and sincerity to evolve a technique of correlated teaching.

Shri Tomar, Superintendent, Vidya Mandir Training School, Wardha, while reading a paper on 'The Basic

Syllabus in Practice' at the first Conference held at Poona in 1939, requested the members of the Conference to consider the following problems and to take decision thereon:

(1) Teaching of basic syllabus through a craft and the social and physical environments of a child;

(2) To evolve some definite guiding principles of the method of correlation to help and guide the training school teacher who is responsible for training of practice teaching of pupil-teachers under training in a Training School;

(3) Allotment of time for craft training and for correlated studies.

Thus, after the introduction of the scheme, at the initial stage, practical workers were puzzled for want of a technique of correlated teaching. The workers had to break new ground at every step. There were many problems of a practical nature regarding correlated teaching that needed to be solved. In this respect, the Poona Conference was a land-mark in the history of correlated teaching and it gave a clue to the solution of many problems of a methodological nature. Many educationists felt that the practice of correlated teaching was somewhat different to the recommendations made by the framers of the scheme. It was not in accordance with the spirit of the resolution of the Wardha Educational Conference held in 1937. The third resolution of the Conference recommended as under:

The process of education throughout this period should centre around some form of manual and productive work, and that all the other abilities to be developed or training to be given, should, as far as possible, be integrally related to the central handicraft chosen with due regard to the environment of the child.

Let us examine now the practice of correlated teaching as was observed in the existing basic schools, in the light of this resolution:

(a) In actual practice only one productive craft of takli spinning with its allied processes was taken;

(b) Development of other abilities was recommended and training to be given, was, as far as possible, to be integrally related to the central handicraft chosen. While in actual practice, efforts were being made neither to develop

abilities of children nor to train them, but to pour in academic information of all subjects which were not integrally related to a craft, but loosely associated with it;

(c) Training was recommended, while in practice, artificial and far-fetched correlated giving of information was done. The significance of the phrase 'as far as possible' was violated and academic correlation was being practised at all costs.

Natural Correlation

To remove the shortcomings, created by such artificial methods of correlated teaching, the Poona Conference made a definite recommendation which was as follows:

> Correlation should not be unnecessarily forced; it should be correlated not only to the basic craft, but also to the child's physical and social environment, which offer equally rich possibilities for this purpose, and enrich the child's basic knowledge profitably. (Finding No. 11 of the conference).[4]

Thus, the Conference advocated the natural correlation of teaching which was to be achieved not only through a craft, but also through the social and physical environments, the rich environmental possibilities to be utilized for the child's development through the process of correlation. The first as well as the second Conference contributed much towards the solution of the problem of training teachers and the problem of practice of the technique of correlated teaching in day-to-day schooling. But, unfortunately, after the second Conference held at Delhi in 1941, the nation and the world passed through a period of crisis and the period from 1942 to 1945 was a period of struggle and strain, particularly for the national workers of India. This affected the working of the experiment, and during this period also many misconceptions arose because educational workers and thinkers were not able to work in a normal atmosphere.

[4] H.T.S.: *One Step Forward*, p. 187

THE EXPANSION OF THE TECHNIQUE OF CORRELATION

Problems of Practice Teaching

In the preceding chapter, we have seen that correlated teaching, at the initial stage, was craft-centred. After the first and the second Conferences, emphasis from craft was shifted to environmental factors. With the expansion of the basic scheme the problem of training teachers also became acute, and training institutions were converted into basic training institutions and this, in turn, brought about the need for change of work in practice teaching meant for the training of teachers. During this process of expansion the nature of practice teaching work followed in training institutions was changed to a certain extent. The organizational aspects of practice teaching work as well as its methods of practice, gave birth to some of the misconceptions which were then prevalent.

The functioning of a basic school depends to a very large extent on the quality and quantity of training which a pupil-teacher receives in the use of the technique of correlation. The Principal of the training institution sets the syllabus, and also trains pupil-teachers in the methods of teaching, based on the technique of correlation. Thus, they become familiar with the contents and objectives of the syllabus, and by practising teaching, they get an insight into the use of the technique. The following are the problems created by such practice teaching work:

(a) Interpretation of a correlated unit;

(b) Nature of practice teaching units;

(c) Duration of time for teaching 'a correlated unit';

(d) Change of syllabus of practice teaching and its effects.

At the initial stage, different training institutions had their own time-tables and they varied in prescribing the

number of lessons to be completed by pupil teachers in the course of practice teaching work. Some training institutions gave continuous practice, while others gave intermittent practice. Some reserved half a day for the practice of a correlated unit, others allotted a few periods for the practice of a correlated unit, and still others prescribed only correlated teaching as a process of practice teaching work, while some prescribed a few correlated lessons, along with the teaching of certain lessons of a formal type. The organization and the execution of practice teaching work in our various training institutions varied according to their needs, administrative convenience and their concept of correlated teaching. Out of these, was created the history of the technique of correlated teaching.

Various Provincial Governments initiated the scheme though each did so on a different basis. Some Governments introduced the scheme in basic schools on an experimental basis in selected compact areas, and started basic training institutions to train teachers. Teachers were not given continuous practice teaching work. They were given intermittent sessions. The duration of about half a day for each session of a correlated unit played an important part in practising multilateral correlation.

Expansion of the Scheme and the Change in the Syllabus

The scheme of basic education, introduced in 1939 as an experimental measure, became an essential feature of the primary system of education in 1946 and thereafter. The work of expansion of basic education created the problem of the training of teachers and this in turn created the problem of conversion of ordinary primary training institutions into basic training institutions. As a preparatory step the syllabus of the basic training centres (started in 1939) was changed in 1945, so that they could serve as models for the work of ordinary primary training institutions, which were to be converted into basic training institutions in the near future. The syllabus of practice teaching work of the basic training centres was also changed. Consequently, the duration of time to practise a correlated unit and the types of lessons to be taught were

changed. The duration of the unit was lessened from half a day to two or more periods, each period being of 45 minutes. The revised basic syllabus was introduced in ordinary primary training institutions with the intention of converting them into basic training institutions. During the process of conversion of these institutions, difficulties were experienced, particularly regarding the organization of practice teaching work.

Misconceptions regarding the Interpretation of a Correlated Unit

In the revised syllabus of practice teaching work meant for the training institutions, there was an attitude of compromise. Formerly in the basic training centres, only correlated lessons were prescribed, though the duration of practice teaching varied. In the new syllabus a compromise was achieved and for the practice teaching work, correlated lessons, single lessons and multiple lessons were prescribed. To do away with the shortcomings of intermittent practice, even one week's continuous practice was also prescribed. In actual practice the differentiation between a correlated lesson and a single lesson was generally made on the following assumptions:

(a) A correlated lesson must have an 'activity' of visible nature in the process of teaching. A single lesson was considered to be a formal one with no tinge of 'activity' in the teaching process;

(b) A correlated lesson to last for two or more periods, i.e. for 70 or more minutes and a single lesson to last for one period i.e. for 30 to 40 minutes.

'Activity' and 'time-factor' were taken to be the criteria in differentiating a correlated lesson and a single lesson. This assumption also gave birth to another misconception, namely, that of interpreting a type of teaching—'correlated teaching' and 'formal teaching'—which is also discussed in this chapter.

'The Activity Fad' for Correlated Lessons

Unfortunately it was believed that the inclusion of an activity was necessary for conducting a correlated lesson, and this created a lot of trouble in the organization of

practice teaching work in basic training institutions. Every pupil-teacher had to give about ten correlated lessons as a part of his practice teaching, and it meant that training institutions had to provide a number of activities for correlated lessons. Besides this organizational difficulty, training of pupil-teachers and learning on the part of children in schools attached to basic training institutions also suffered. Activities were not planned and organized for the betterment of the life of children at school, but they were dragged in to satisfy the activity fad of persons who were responsible to guide, supervise and assess the practice teaching work of pupil-teachers under training.

This activity fad even affected the attitude of pupil-teachers towards practice teaching. Each pupil-teacher had to finish his correlated lesson within a period of about 70 minutes. During so short a time, he had to introduce and organize an activity and to impart correlated knowledge in relation to it. As a result, within the short space of two periods, neither was the activity done well nor knowledge imparted systematically! The aspects of both activity and knowledge were handled loosely and unsystematically. Consequently, at the end of two years, the pupil-teacher did not have a proper idea of the technique of correlated teaching or the spirit of the psychological and educational principles underlying class organization and teaching. The pupil-teacher entered the class for two periods with his activity-centred unit, quite ignorant of what had taken place in the previous periods, and quitted the class with his supervisor, after the two periods, not caring what was to follow or happen to his activity and teaching given to the children.

Even when conducting his correlated lesson, he was not found to be serious either in the use of the activity-technique or in the systematic presentation of academic subjects. As a result, the product of activity was spoiled, and educative possibilities were lost. He was concerned simply with finishing his quota, i.e. one of his correlated lessons out of the prescribed ones. In actual practice, he tried to link loose academic information with the

process of the activity undertaken. Even loosely connected information was not taught, but simply given at random.

Unfortunately, he laboured under another misconception also, namely, that it was not necessary to adhere to the general principles of class organization and teaching, which are considered essential for the teaching of 'formal lessons' practised during a single period. To fulfil this 'activity fad' in actual teaching, he remained indifferent to the needs, calibre and environment of the child. Activities like digging the ground and preparing plots were dragged in during the process of a correlated lesson even at noon in the extreme heat of March and April in the name of practice teaching work.

Formerly, craft-centred multilateral correlation was tried; now, activity-centred multilateral correlation is being tried in an artificial manner. A pupil-teacher is required to give correlated lessons as well as 'formal lessons'. He, as also his supervisor, are not still clear regarding a definite criterion which differentiates one type from the other. During practice, he was afraid that his correlated lesson might be interpreted as a 'formal lesson' or vice versa. In actual practice, motivation was not aroused and hence children felt the burden of activities as well as of academic subjects given at random. At times, children expressed some curiosity, interest and inclination to acquire new skills; but they were not nourished and sustained by follow-up work or continuing the type of work, because each pupil-teacher selected his own activity for conducting a correlated lesson. Thus, the energy and time spent in practice teaching work in giving correlated lessons were not properly utilized for educative purposes and hence the training of the pupil-teachers and the learning of children suffered a lot.

In the selection of subjects to be taught there was no understanding of the needs of the technique of correlation. Subjects were just bracketed together and presented to the pupils along with an activity in the name of correlated teaching. The activity and subjects selected for correlation had no relevance either to the immediate environment or

to the felt need of the pupil. The activity was presented prior to imparting academic information on various subjects. There was no relation to the activity, knowledge and life of the child. The pupil-teacher set the activity and after it was completed he presented the academic subjects, and, in this process, he thought that the activity and knowledge were related, and interpreted it as correlation. As a matter of fact, the teacher planned the syllabus in terms of subjects. The experience gained by the child during his activity was not utilized as a means of education. The activity was treated as a peg on which loose bits of information could be conveniently hung. In actual practice, teaching of a correlated unit—as a part of practice teaching work—was nothing more than a mere combination of two or more units of a single formal lesson in relation to an activity. Even the teaching of academic subject was not methodical and psychological—as it used to be in the teaching of single formal units. The false notion that an activity was an indispensable part of a correlated unit, to be completed within two periods, affected the learning of pupils, and the training of teachers. Moreover, it created trouble in finding innumerable activities with regard to organizing the work of practice teaching of pupil-teachers.

Misconception regarding Environmental Correlated Teaching

After the second Conference of Basic National Education held at Delhi in 1941, there was a trend towards utilizing all the centres of interest of a child and thus fully develop his personality in an all-round and harmonious manner. In actual practice, the emphasis was shifted from the craft and activity to environmental factors and incidents. There was a change in emphasis but not in mental attitude. The approach of the teacher continued to be subjectwise. He presented academic subjects in relation to environmental happenings and incidents.

Mere Presentation of Subjectwise Topics

The teacher failed to realize the importance of creating the necessary atmosphere and background for

environmental teaching. He neither utilized the technique necessary for environmental teaching, nor planned and organized activities and events arising out of environments and utilized them as media of education. He simply gave oral information on various subjects in context to environmental incidents, and interpreted his teaching as 'correlated' to the environment of the child. In actual practice, the teacher simply reserved certain of the traditional subjects for certain social occasions and taught them in the traditional manner, without using them as media of education. Celebrations of days of historical and cultural significance like Rama Jayanti, Krishna Jayanti, Gandhi Jayanti, Christmas Day, Id-e-Milad, Independence Day, Republic Day etc., were observed with rites and rituals, forms and formalities and decorations. Pupils were persuaded to dramatize certain events, and in relation to the particular celebration being observed, the teacher narrated certain stories and events pertaining to it. The concomitant learning inherent in environmental teaching was neglected by the teacher. Children failed to enjoy the thrill of the aesthetic, historical and cultural messages inherent in this form of environmental teaching. There is great potentiality in such environmental teaching of reorienting the outlook, attitude, ideas and ideals of the growing generation. But the teacher failed to realize it owing to his subjectwise attitude and contented himself with the mere presentation of subjects in juxtaposition of environmental happenings.

Ungraded Presentation of Environmental Information

In the history of correlated teaching environmental incidents and happenings became one of the important means of correlated teaching. What was once craft-centred or activity-centred gradually became occasion-centred in the process of teaching. The teacher was ever in search of environmental happenings which he could utilize as a means of teaching which, however, was generally of a literary type. Mere occurrence of, or mere reference to, environmental events was enough for the teacher to show his

teaching as correlated. This led him to present ungraded academic information in the class without respecting the calibre, capacity and the stage of growth of various children. His teaching process consisted in talking about such occasions, and in presenting practically the same information year after year. On the annually recurring social functions like holidays, festivals, and anniversaries the teachers of all the grades started pouring out information on different subjects of the curriculum, and teaching was taken as correlated with these events. In these efforts, there was no system, no plan and no attempt at grading academic information in terms of the child's age, interests and capacities. The following illustrations will make the point clear. At such meetings, celebrating Jayantis of different important people, and days of historical and cultural importance, pupils of lower grades and higher grades received practically the same kind of information. In context to Gandhi Jayanti, Krishna Jayanti and Christmas, pupils of all grades received the same story about the events of personalities concerned—with but little variation.

Before or after the celebration of Independence Day or Republic Day, teachers of all the grades of the school talked about the history of the movements of the Indian National Congress, heroes of the nation and about the National Flag along with its colours, size and implications irrespective of the capacity of their classes to absorb such knowledge. Thus, there was no graded presentation of relevant information in accordance with the interest, need and calibre of pupils. Moreover, such presentation of academic information had no direct relationship with the pupils' instincts, interests and inclinations. As a result, they were not inspired by the teaching of the teacher to feel, to think and to act in response to an incident. They were made simply to listen to the talks of the teacher pertaining to certain events and persons. In actual practice, decoration, dramatization and narration of incidents by the teacher became the chief features of correlated teaching regarding the incidents and happenings of social environment. Observation and excursions etc., became the chief features of correlated teaching regarding the incidents and

happenings of the physical environment. In the context of an earthquake, flood, seasonal change or an eclipse, rainbow or earthquake, the teacher either took the pupils on an excursion if practicable or made them observe the happening if possible and then gave them information concerning it. In actual practice, it was not planned, executed and assessed on an educative basis. In connection with the happening of physical environment, the teacher made a show of observation and excursion of pupils, and, presented academic information generally of geography and science and treated his teaching as environmental teaching. Environmental teaching has potentialities to motivate active learning of pupils and to offer a sound basis for social training. But the teacher's attitude being subjectwise, it failed to realize the desired objectives.

The presentation of academic information, given in context with environmental forces, was not only ungraded but also unsystematic and unmethodical. In the formal type of teaching, the teacher presented information of different subjects of the syllabus in a logical and graded manner. He presented the contents of the syllabus directly without any reference to the experience and environment of the child and hence his teaching was treated as formal. To differentiate his process of teaching in a basic school and to interpret it as a correlated teaching, the teacher tried to link his teaching of academic subjects with some environmental happenings. Formerly he presented a topic to the particular grade for which it was prescribed in the syllabus, while in the process of environmental teaching, the teacher felt himself free to present a subject to any grade because he felt that there was an environmental background for his correlated teaching. In formal teaching, he availed himself of the help of various teaching devices, especially those of exposition, explanation, demonstration, questions, illustrations etc., and made his presentation methodical and effective. In the process of environmental teaching, he narrated ungraded academic information and that too in an unmethodical way. Thus, the teacher changed neither his attitude nor the means of imparting academic information. He simply made a change in his method of reference

to various subjects. His attitude remained as subjectwise as it was before. Words were his means of teaching and the process of presentation of academic subjects was ungraded and unmethodical. Just as craft or activity was utilized simply as a means of linking together academic information so also environmental incidents and happenings were used as a means of linking together academic information.

Misconception regarding the Use of Text-books

There was a protest against the effects of traditional education, which was 'formal'. The medium of that education was a 'word'. Text-books were the main source of knowledge for the teacher and the taught. In actual practice, means of education became the ends of pursuit. Cramming of text-books became the very process of learning for the pupils, and presentation of textual matter formed an important part of class-room teaching. In the cry against the undesirable effects of 'formal' education, outstanding features of that education were also denounced, and text-books were one of them. As such, there was a cry to do away with text-books. At the initial stage of basic education, there was a tendency to do away with text-books. Educational workers felt that the use of text-books killed the spirit of study and investigation on the part of teachers and killed the spirit of initiative and independent thinking on the part of children. Guided by this revolutionary attitude, they recommended correlated teaching without text-books, relying too much on the ability of teachers. Basic teachers were advised to compose their own necessary teaching materials for the purpose of correlated teaching. In actual practice, the scheme was executed by all types of teachers with their own limitations. Neither educational thinkers nor workers were able to prepare the necessary text-books nor were teachers sufficiently competent to write the same for day-to-day use. This state of affairs was one of the chief reasons why teachers presented ungraded environmental information. They had to teach daily and they tried to present anything and everything in the absence of text-books.

In the traditional type of education, text-books gave information of an academic nature in logical order and gradation. It varied to suit the mental growth of children. They were great help to teachers to decide the quality and quantity of knowledge to be imparted, and indicated the gradation of presentation. As a process of learning, pupils received systematic and well-graded textual matter.

Instead of doing away with the defects of text-books and their use, a revolutionary attitude of a negative nature impelled some educational workers to do away with text-books altogether. Indiscriminate use of text-books was objectionable, but not the text-books themselves. The technique of correlation does not prohibit the existence of the text-book. It accepts its necessity with definite directives regarding the selection of contents, its presentation and use. It directs that planning and organization of material should centre round the experiences and environments of the child and should be recorded in text-books which should be integrally related to the life of the child. Presentation of the matter should prefer psychological order to logical order. In text-books of the traditional type, children had to read, write, count and interpret the experiences of others, in the form of contents pertaining to different subjects. In text-books based on the technique of correlation, children will get contents of life situations and they will learn to read, write, count and interpret their own experiences of life and of the people around them. Gradation of contents should preserve the psychological as well as the logical order of growing children.

The Preparation of Text-books

To prepare such text-books is not easy and is not within the capacity of every teacher. It requires an experimental attitude on the part of the teacher to record observations and experiences of children at work and with that data to evolve a well-graded scheme of correlated studies based on the technique of correlated teaching and to prepare proper text-books in accordance with the needs of the syllabus. Unfortunately, however, for nearly a decade neither were teachers able to prepare their own useful

teaching material nor were they given suitable text-books. The practising teachers were the products of orthodox education and could not resist the temptation to pour out academic information. In actual practice, to label their teaching as correlated, they presented as much ungraded academic information as possible in relation to a craft, activity or an environmental occurrence. They presented ungraded and loose academic matter in the absence of text-books. The tendency of doing away with text-books and recommending correlated teaching made the learning of pupils chaotic, loose and ineffective. A cry of protest arose against the effects of such unsystematic teaching. Persons working in training institutions and other educational workers were directed to prepare suitable literature for children as well as for the teachers of basic schools. But, nearly a decade passed before any suitable and adequate literature became available.

The problem of production of suitable reading material for teaching became so acute that it had to be included as one of the compulsory items of the course of Activities and Studies prescribed for training of Graduates at the Basic Training Centres. Trainees, admitted for training, were trained graduates, and, as such, they were conversant with the philosophical, psychological and methodological aspects of education. As a part of their practical work in teaching, production of suitable reading material for teaching was prescribed. Trainees practised correlated teaching, came in close contact with the pupils and teachers of basic schools and knew their problems, difficulties and aspirations. On the strength of practical observations and experiments, the trainees were required to prepare two papers as part of 'Expressional Work'. One was meant for pupils of basic schools and the other for teachers. This scheme of producing reading material was organized to help children and teachers, for the betterment of their work. They tried to prepare a reading series which presented reading material bearing relation to the experiences and life situations of children at school and out of school. Care was taken to adjust contents, language and presentation to suit the needs of growing children as well as to the needs of the technique of practice.

The other type of work was meant for teachers of basic schools. Subjects of a practical nature were selected to help teachers in their day-to-day work.

A dearth of proper text-books created trouble for teachers in their day-to-day work, as they were unable to do their work efficiently. Therefore, they resorted to different devices as means of teaching. At the initial stage, the doing aspect of the spinning craft was stressed, neglecting the knowing aspect, and, in environmental teaching, environmental background was stressed, resulting in the pouring in of loosely associated, and ungraded information. Gradually, however, the activity aspect was emphasized —resulting in efforts of linking academic information in season and out of season with activities, but these were selected indiscriminately. Moreover, such information as was presented was not organized logically and hence the proper assimilation of knowledge was not achieved—as was desired.

Misconception regarding Drill Work, Revisional and Review Work

Though the attitude of a teacher was subject-based, yet his method of presenting them was directed by the need for correlated teaching. This attitude harmed the medium, the process and even the effects of correlated teaching. The medium of correlation was not utilized as medium of education, but as merely a means of linking together academic instruction, and thus the process of correlation was made artificial and far-fetched. Even the effects of correlated teaching were far from satisfactory in the absence of drill-work.

In actual practice, the teacher tried to introduce academic subjects in an incidental manner, and at times, accidentally, keeping some relation to an activity or occasion to maintain the fact that his teaching was correlated. He merely introduced odd bits of informations here and there. He did not organize them logically and systematically. Teaching demands inductive as well as deductive processes of presenting educational material to pupils. In subjects like arithmetic, geometry, grammer,

science, geography etc., children are required to find out their principles by inductive processes and to form generalizations and to apply the truth thus found out to actual life situations. In other subjects, different abilities like those of reading, writing, counting, understanding, appreciating etc. are to be developed through systematic literary training wherein inductive as well as deductive processes of educational practice are essential. This requires drill-work, revision and review work to make learning purposeful, systematic and effective. Unfortunately, the teacher did not practise drill and review work owing to a misconception regarding the interpretation of correlated teaching. Generally, drill work and review work are of a formal nature and the teacher found it very difficult to show any reference or presence of activity in that type of work, hence he refrained from practising this type of work, lest his teaching might be interpreted as formal. Secondly, he was keen to prove that the process of teaching was correlated, rather than to examine critically the effects of his teaching methods on the actual process of learning of children. Correlated teaching by the teacher was considered to be of greater importance than correlated learning on the part of the child. A mere introduction of associated academic topics satisfied the teacher. The following illustration will make the point clear:

In one school, while preparing a plot of ground for kitchen gardening, the teacher made pupils measure the length and breadth of the plot. This measurement was taken either before the activity or after the activity. He discussed this measurement with children and presented the idea of finding the area of the plot. He introduced this idea only by one single instance and did not try to drill in that idea, giving other instances to make the concept of area and the process of finding out area of any place, clear to the children.

The point of the teacher's contention was that he taught pupils about an arithmetical topic in a correlated way keeping it related to the activity of the kitchen gardening. He felt satisfied by his success in presenting this arithmetic problem, not in a formal way, but in a

correlated way, fulfilling the felt need of children for the performance of the activity. Even this aspect of felt need created some trouble in correlated teaching. At times, there was a genuine felt need, of children, but off and on the show of felt need was made by the teacher and it was thrust upon children to give a starting point for the process of his correlated teaching. Often, the felt need of children was relegated into the background, and the felt need of the teacher of proving his teaching as correlated was attended to.

His over-emphasis regarding the correlated introduction of subjects made him undervalue the importance of drill work and the deficiency in such work adversely affected the learning of children. In the instance cited above, the idea of finding the area was introduced only once and that too in an incidental manner, and hence the pupils failed to find out the area of a surface in life situations when the need arose because the idea was not thoroughly drilled into them and impressed on their minds. Even when dealing with incidents in the social and physical environments, the teacher simply introduced information concerning them, but did not take care to review such work for a comparative and critical study, which helps children to evaluate them and draw their own conclusions.

In another school, a single excursion to a field inspired the teacher to introduce a lot of loosely connected information. He talked about types of crops, varieties of soil etc., but did not organize the facts to help pupils to understand them. Even the work of language study suffered a lot. The teacher tried to achieve multilateral correlation and at the end of his teaching, he made pupils describe, either orally or in writing, the processes of work done and the different topics introduced. Language teaching was interpreted by teachers as merely a means to summarize and report the working of activity processes and different subjects of the syllabus. Thus, there was no real teaching of language. As a result, the ability to speak clearly and correctly, to read and write, and to appreciate fine and noble sentiments expressed in prose and poetry were not developed. Consequently, pupils remained weak in

instrumental subjects like language and arithmetic, and their basic abilities with the three R's were not developed adequately and satisfactorily.

The results of such misconceived correlated teaching, grieved both the educational workers as well as the guardians. Some people were inclined to believe that pupils of basic schools did not make satisfactory progress in the instrumental subjects of studies like language and arithmetic. The fault was in the misconception of the teacher at work, and not with the ideology of the scheme or with the technique of the method. As a matter of fact, in this technique, the teacher gets direct and creative experiences and should use the life situation of the children as a basis for his teaching. This helps him to maintain interest and purpose in children when they learn. The problem of 'proceeding from the known to the unknown' does trouble a teacher when he has to teach the ordinary subjects generally prescribed in schools. Trouble arises when subjects not pertaining to the actual life of children, but pertaining to things beyond their imagination and experience have to be taught. Then, the teacher has to evolve psychological devices to make his presentation interesting. In the traditional system matter unrelated to a child's life was given for drill and review work, and hence the learner had to cram the matter and it became drudgery. A child had to learn to add, subtract, multiply and divide with regard to things unknown to him, or had to find out the compound interest of money, invested by an unknown wealthy man. In language study, he had to read and write about experiences and life-situations of others, or to sing and recite poems pertaining to actions, emotions and aspirations of unknown people. Thus, the life of the child was not related to the matter presented for class teaching, and hence the learner was not able to enjoy the learning process and enrich his own life.

Defects in Literary Training

It is easier to develop the fundamental abilities of a child regarding the three R's through life-centred matter than through mere formal and academic matter laid down

in the syllabus. The deficiency in drill and review work hampered the progress of literary training of pupils, even though they got sufficient scope to learn about their own life. To teach a particular subject is one thing and to develop a particular ability through that teaching is another. Even in the traditional system, teachers suffered from the erroneous notion that they had to complete the prescribed course in any manner whatsoever. Though they were eager to complete the prescribed course of studies, they were not concerned about developing the abilities of the children through the study of the different courses which were set. They tried to finish all the reading lessons of a prescribed text-book, but did not care to develop the reading ability and the power of expression and understanding through well-directed practice, or by utilizing the different kinds of materials of the school. Consequently, children, who were able to read the prescribed text-book fluently, experienced difficulty in reading the material out of context or in reading other books. Teachers made efforts to complete all examples, given in a prescribed text-book of arithmetic, but did not try to develop the power of children to understand the principles therein. Consequently, children were at sea when similar examples, but not of the text-book, were given. Teaching of the contents in a course of studies is a means of realizing the objectives of education, but to the teacher, generally it becomes an end in itself.

Hence, cramming was resorted to, and, at the end of school, children were burdened with imposed information, and not with the joy of creative and constructive development of their different abilities. This defect was detected by educational workers and thinkers and they recommended the need of 'judicious mixture of drill and review work' with incidental correlated learning of children. Stressing this need, Prof. K. G. Saiyidain has said:

> There is, however, one important precaution which teachers who experiment with this method should constantly bear in mind. Their approach is fundamentally psychological i.e. according to the laws of the child's mental development. But their ultimate goal, as far as the intellectual aspect of education is concerned, is logical i.e. they

have to aim at building up in the child's mind, in due course, a coherent and systematic structure of knowledge. In other words, they have to conduct their teaching in such a way that knowledge, which is acquired psychologically by the child, gains scientific organization. The Project Method and the technique of co-ordinated teaching make the teacher's task much more difficult because, while presenting to the child the psychological facade of the process, he has constantly to think how, in view of the objective, he can build a safe bridge from the psychological to the logical. The difficulty, however, is well worth facing, because the only other alternative is to sacrifice the child's interest, activity and spontaneous enthusiasm; in fact all that makes schooling educative—to a mere formalism, a shadow which has no substance. It demands mental alertness and vigilance on the part of the teacher, a capacity for constant stock-taking of the child's acquired knowledge with reference to the requirements of the syllabus, and the ingenuity to create interests, situations and stimuli which will lead the child happily to the desired goal. Teachers who threw themselves into this crusade for a better education should courageously take up the challenge of this difficult task, for the Providence that has created this universe had ordained that nothing should be significant or worthwhile which does not call for strenuous effort and sacrifice.[1]

Thus, like other educationists, Prof. Saiyidain is conscious of the shortcoming of the technique of the method and recommended review work to realize the objectives of the scheme. To acquire academic information through subject matter, and skill and proficiency through craft and other activities is one thing, and to transform that acquisition into assimilation in the form of knowledge and character formation is another. The former without the latter kills the very spirit of the scheme. This process of transformation requires well-organized and scientific drill work and review work. He has recommended its necessity as well as the method of working of teachers to realize the objectives of the scheme.

The teacher did not enforce drill and review work owing to the misconception concerning 'formal' teaching, and 'correlated' teaching. The traditional type of teaching was denounced as being 'formal'. It was 'formal' because

[1] H.T.S.: *One Step Forward*, pp. 80, 81

the contents of education were not child-centred, the medium of presentation were words, and the goal in view was to pass an examination, and hence was not for the betterment of the child. Education was not given through the daily living of the child, so, the contents of learning did not arise out of it—as should have been the case. Though formal teaching was severely criticized, yet there remained the effect of the prevailing atmosphere on the mind of the teacher who practised the scheme. To label his teaching 'correlated' and to be free of the charge practising 'formal teaching', he tried, at any cost, to bring activity or an environmental factor into relation with his teaching of subjectwise topics. He was inclined not to teach anything, wherein he could not show relation between an activity or environment, and drill, review and revision work are of this type. Therefore, it became necessary to change the nature of practice teaching work, and the practice of unilateral lessons was introduced.

Twofold Purposes of Unilateral Lessons

In the process of correlated teaching, the teacher was inclined to link academic subjects to an activity or to an environmental occurrence within the reach of the child. In the process of correlation, the existence of an activity, or the happening of an incident or accident was emphasized more than the graded and systematic presentation of literary knowledge. As a result, there was omission of certain subjects or even overlapping of subjects in the learning process of the child. Such matter as was taught was not drilled and reviewed; consequently, there was very little assimilation of literary learning and less of creative ability. To remove the deficiencies and improve education, the practice of unilateral lessons was prescribed. The pupil-teachers of the second year class, practising correlated lessons—as a part of their practice teaching work, and the literary topics introduced by them in their correlated lessons—were to be generally taken as the basis of units of unilateral lessons to be given by the pupil-teachers of the first year class. In the process of conducting a correlated unit of two periods, a pupil-teacher of the second year class

had to plan and organize an activity on the Project Technique and therefore he did not get sufficient time to do full justice to the teaching of the correlated literary contents of the syllabus. He could introduce correlated literary matter, treated to suit the needs of drill and review work so as to enable a child to assimilate knowledge better. Unilateral lessons gave sufficient scope for practising drill and review work, but teaching of the correlated academic subjects suffered as a result since they were not thoroughly taught, though kept within the process of imparting correlated lessons. The practice of unilateral lessons was also recommended to give sufficient scope to trainees of the first year class to equip themselves adequately with methodological aspects of literary training, class management and class organization. The giving of unilateral and correlated lessons side by side will make pupil-teachers realize the importance of a judicious mixture of drill and review work in day-to-day teaching along with correlated teaching to achieve integrated learning on the part of children.

Thus, there were potentialities in the practice of unilateral lessons to deal with the problems of drill and review work and to make teaching graded and methodical, but this required well-planned practice teaching work in the basic training institutions. The nature of practice teaching work of both the first and second year classes should be integrally organized. Unplanned and unorganized practice teaching work in the training institutions creates problems and difficulties.

Misconceptions regarding Unilateral Lessons

To remove shortcomings and difficulties arising out of the practice of correlated teaching, unilateral lessons were prescribed, but, in actual practice, the term 'unilateral lesson' was misinterpreted by some workers, creating difficulties. They did not realize the implications of this type of lesson, which lay in selecting and presenting teaching material arising out of the life-situations of a child. Its implications were these:

(1) To select child-experience-centred material and not mere bookish material; and,

(2) Practical approach to teaching and not academic approach.

Thus, the selection of the contents and its method of presentation to the class-differentiated unilateral lessons from formal ones, though both were of the same duration in time, i.e., one period. These inherent implications in unilateral lessons were lost sight of by some workers and teachers in training institutions who treated them as formal lessons of the traditional type on the basis of misconceived interpretation of a correlated unit and a single period because:

(1) The time factor-—one period for conducting a lesson;

(2) Treatment or procedure of conducting the lesson; absence of an activitiy, formal treatment of subjects.

Owing to this misconception regarding the activity fad, they treated these unilateral lessons as single period formal lessons and considered them as a mere means of completing the course laid down in the syllabus of basic schools, and not as means of providing training to teacher for class teaching or for practising drill and review work. Many of them felt that it was very difficult to finish the prescribed course of the basic schools and treated unilateral lessons as means to finish the course and not as means of providing training to pupil-teachers under training. They treated the prescribed course of unilateral lessons as a course of lessons of a single period each—as was being practised in the training institutions before they were converted into basic institutions. Thus, they were inclined to select syllabus-centred matter for units of unilateral lessons in the same manner as they used to do for formal lessons in training institutions. Thus, guided by a misconceived notion, the absolute necessity of planning, organizing and co-ordinating the practice teaching work—as an integral whole—of both the first year and second year courses in the training institutions was not attended to. Generally, the practice teaching work of the first and second year classes was conducted independently, bearing no relation to each other. Consequently, even after giving supposedly unilateral lessons, the pupil-teacher of the first year class was

not able to obtain a proper understanding of the essentials of class management and class teaching. He did not realize the importance of selecting child-centred matter, with a practical approach, as a process of teaching for the betterment of the child. By this misconception, the subjectwise attitude of the teacher was nourished and encouraged.

Some workers interpreted the revised syllabus of practice teaching work as a compromise—providing scope to trainees for the practice of formal teaching through the means of unilateral lessons, and giving them opportunities to practise correlated lessons. They believed that it meant combining formal teaching and correlated teaching, which they mistook as two separate entities, and thus did not interpret and practise them as an integral part of the whole training process of practice teaching work, meant to equip pupil-teachers with a definite knowledge of the use of the technique of correlation in basic education. The root of their misconceptions regarding formal and correlated teaching lay in their emphasis on the aim of teaching and the medium of teaching. From this point of view, it is worthwhile to discuss the difference between formal teaching and formal treatment of subjects.

Difference between Formal Teaching and Formal Treatment of Topics

In the history of correlated teaching, the aspect of formal teaching became one of the chief topics of discussion. With the expansion of the experiment, all primary training institutions were being converted into basic training institutions. The minds of persons responsible for the training of pupil-teachers were saturated with the methods of formal teaching, while they had to organize the practice of correlated teaching to be given to trainees under their control. This was the atmosphere that prevailed at the initial stage of the experiment of the scheme. Gandhiji suggested 'education through a craft' and the atmosphere was surcharged with the idea of 'a craft'; but those concerned with implementing the scheme were interested in 'subject teaching' and hence they did not utilize the craft as a medium of education, but utilized it as a means of correlating only

academic instructions. In the same way, during the initial process of converting the training institutions into basic training institutions, workers organized the practice of correlated teaching as a part of practice teaching work with their minds filled with the concept of formal teaching. This disparity was naturally very evident during the initial stage of the scheme, and artificiality in the practice of correlated lessons was the outcome.

A common question was: "Is there any place for formal teaching in the practice of correlated teaching used as a technique in the scheme of basic education?" Some workers, possessing misconceptions regarding correlated teaching objected to even formal subjects in the curriculum. They misconstrued correlated teaching, as a process of imparting information along with an activity or an occasion. They were baffled by their opponents pointing out omissions and overlapping of subjects, and the giving of ungraded, unsystematic and undrilled work which affected the education of children. These workers, who were critical and sensitive to the acute shortcomings of the practice of incidental correlated teaching, felt the need of making the process of teaching systematic, logical and effective. They were inclined to teach useful and necessary literary subjects even without the presence of an activity or an occasion. They treated such subjects in a formal way, but they were charged by the orthodox teachers—of the traditional system of education—that even in basic education they had to resort to the old system of teaching i.e., 'formal teaching'. This problem became the cause of controversy. The crux of the problem was:

(a) Basic education was interpreted by some teachers as a system of education wherein only correlated teaching should be practised and everything should be presented to children in a correlated way;

(b) Invariable presence of visible activity or occasion was considered to be necessary for presenting academic topics to children.

In general, it can be said that the factor of visible presence of an activity or an occasion constituted 'correlated'

teaching, and its absence made teaching 'formal'. Even the system of education was interpreted on the basis of the nature of teaching. Correlated teaching was taken to be an important feature of a system of education known as basic education and a process of teaching without the presence of or reference to an activity or an occasion was considered formal, making the system of education 'traditional'. This indicates to what an extent misconceptions regarding correlated teaching influenced other concept of education and its practice.

At the basis of all these, there were misconceived ideas about the process of teaching. Let us study the points of difference between the formal teaching and formal treatment of subjects. They can be classified as under:

(A) Emphasis in Teaching

In formal teaching the child is relegated into the background and teaching of subjectwise matter is of primary importance;

(B) Selection and Purpose of Teaching Material

In formal teaching, the contents of teaching bears no relation with instincts, interests, needs and life-situations of the child. They are imposed on the child from the pages of the syllabus which is subjectwise and is prepared by adults with a view to prepare the educand for future life according to the standards and expectations of adults. The teacher teaches the contents to finish the courses of the syllabus and to enable the child to pass the examination, of the traditional type.

(C) Medium of Teaching

In formal teaching medium of teaching is not the creative and constructive experience of the child but either a spoken or a written word which represented experiences, values and aspirations, not of the child, but of adults.

Emphasis in teaching, criterion of selecting the contents of teaching, the medium of teaching and the very process and purpose of teaching along with their effects decide the formalism of formal teaching and not simply the duration of teaching a unit or the mere presence of an activity or an occasion.

The Essence of Basic Education

In basic education, the child is at the centre, and the aim is to achieve a harmonious development of the child as an essential member of a well-organized community, living to realize certain ideals of life. The fundamental difference is in the criterion of deciding the contents of teaching. Useful, constructive experiences of the child become the starting point of correlated teaching. The contents of teaching and the very process of teaching keep the child at the centre and enable him to experience the useful experiences of life with a purpose to improve the very quality of living. The duty of the teacher is to create an atmosphere wherein the child is inspired to live his life for the purpose of learning, which modifies his present as well as future life—as a member of a co-operative society. There is direct, purposeful and integrated relation between the experiences of the life of the child and the contents of studies given in the syllabus. The basic syllabus does not give words of experiences, but the very experiences of life. It is an 'activity centred' syllabus. The teacher has to plan and organize activities as a method of teaching and has to enable the child to organize and conduct activities as a process of learning. The child has to live an activity, and not simply learn about an activity. As a process of learning through living, the child has to receive useful knowledge, to understand and interpret the very experiences of life. As a felt need, the child acquires knowledge. The source of knowledge is his very living in the school which inspires him to acquire knowledge. Thus, knowledge given in the technique of the scheme, is not word-centred, but experience-centred.

Necessity of Formal Treatment of Subjects

Through schooling, the child is directed to have rich and various experiences, in the form of practical and constructive environmental activities and is guided by the teacher to understand the why and wherefore of these experiences. To develop this understanding, the teacher has to teach academic subjects also. These are classified into different categories of studies in the syllabus for the

facility of the teacher and not for the learner. They should arise out of the experiences of the child and should be presented as an integral whole, to understand the total experience gained by the educand. The fundamental difference between formal teaching and formal treatment of topics is in the source of selection of topics and the method of presentation. In formal teaching, the contents of a syllabus are not experience-centred; they are presented compartmentally as different subjects. In basic schools, they are presented as a whole in a co-ordinated manner and in the context of the very experience and environment of the child. After the activity, the teacher is required to present literary subjects related to the activity just undertaken. Correlation demands that there should be integration of literary contents with the active and purposeful experience of the educand. The following illustrations will make the point clear:

(1) After constructing the compost pit, the teacher is required to teach the child its measurements, the formation of manure, kinds of manures and their uses. Along with the activity, the teacher should teach about these. He may require a day or two for the purpose.

(2) Through constructing a kitchen garden, a teacher helps a child to learn about the measurement of the plot, kinds of soil and their bearings on crops etc.

(3) After celebrating Republic Day, he may teach the child about the history of movements of national struggle, the formation of the present constitution, duties and responsibilities of a citizen of a democratic country etc.

(4) After celebrating a week of *vastra-svavalambana* (cloth self-sufficiency) in the Gandhi Jayanti week, he suggests the child to do arithmetical calculations regarding the production of cloth—from cotton to the cloth produced, history of different institutions and agencies working for the same purpose, movements of village reconstruction, and economical and cultural aspects of the movements etc.

(5) After the occurrence of a lunar eclipse, he teaches the child to understand the natural phenomenon

scientifically, the problems of rotation and revolution of the earth and other planets, and the working of solar system etc.

The above illustrations are given to indicate that the teacher has to present academic contents in relation to active, purposeful and directed experience, undertaken by a child to enable him to feel, think and understand that experience.

While presenting such academic contents, the teacher should be discriminate regarding the quantitative and qualitative aspects of those contents. They should be presented according to the calibre of the child and his need. He should be careful not to present just anything, loosely connected with the child's experience, but rather that which is integrally related to his experience. The teacher has to present and teach such subjects for a sufficient length of time with a view to develop the understanding of the child. This process of presenting and teaching literary contents, bearing relation to the activity of the child, which took place some time before, was treated as formal teaching as there was no existence of an activity of visible nature during the process of teaching literary topics.

Some of the teachers preferred to leave out certain essential subjects for fear of being charged with practising formal teaching and consequently harmed the cause of education. They failed to realize the nature of literary contents, which were not bookish, but bearing integral relation to the experience and environment of the child. It is true that during the process of treatment of such subjects, there was no existence of an activity of a visible nature and from this point of view, the treatment of subjects was formal; but not the teaching. Such a formal treatment is indispensable in the process of education to organize the learning process of a child for his integral development. It is not possible and even desirable to maintain a relation of the 'doing of a process' of an activity for all the time during the period of formal treatment of subjects. To expect this is unnatural, uneducational and ridiculous. Such a forced misconceived, co-extensive correlation of an

activity and treatment of subjects created artificiality and waste in the practical working of the scheme of basic education.

Though the treatment of subjects appears 'formal', yet, the purpose and medium of such teaching—along with its effects—are child-centred, and hence is not really formal. Subjects chosen from the experiences of the child's life are taught, not with the idea of stuffing his mind with the purpose of enabling him to pass an examination, but with the purpose of interpreting and enriching his experiences of life and thereby enriching his personality. He learns about such things arising out of actual living in the school. He achieves and assimilates the necessary skills and knowledge for the betterment of life. Thus, formal treatment of subjects is necessary for imparting integrated literary training. If this differentiation between formal teaching and formal treatment of subjects be critically observed and practised while implementing the scheme, many of the doubts and difficulties will be surmounted and correlated teaching by the teacher and correlated learning of the child will be natural, systematic, purposeful and effective. Therefore, it will be clear that there is a definite place for the formal treatment of subjects for the effective working of the scheme. But the question which puzzled the teachers was, when to practise the formal treatment of the subjects?

Organization of the Formal Treatment of Subjects

The formal treatment of subjects has also created a difference of opinions and further difficulties in correlated teaching. This process of treatment was commonly known as imparting correlated knowledge and the burning problem for many years was: "When should knowledge be imparted—before starting the activity, during the activity itself, or after completing the activity?" The problem was very acute at the initial stage of the practice of the system. It was discussed in the first and the second Conferences of Basic Education. The general suggestion given was to impart knowledge at the psychological moment when the child was ready to receive it.

What Is Not Correlated Knowledge

For the ordinary teacher it was not easy to know the psychological moment or to utilize it for imparting knowledge. So, in actual practice, some of them talked about certain topics connected with the activity, just before starting it. Thus, they thought that they imparted correlated knowledge and felt contented. Actually, they did not teach, but merely introduced some bits of information, which had some relation to the activity. The following illustrations will make the point clear:

1. The teacher talked and introduced some information about a carding bow, its uses, regions where bamboos grow, etc. before setting the process of carding the cotton, and then left the pupils to continue carding by themselves.

In reality, he merely introduced some topics or made reference to certain topics through a discussion or talk. He failed to understand that a mere introduction or touching the fringes of the subject is not teaching. Some teachers wanted to make their approach psychological and they tried to introduce literary contents, not before the start of the activity, but along with the actual execution of the activity. The following instances will clarify the point:

2. a teacher encouraged pupils to prepare slivers along with all the processes from cotton cleaning to preparation of slivers. He tried to give information of explanatory nature regarding the handling of tools, correct postures of sitting, different processes to be observed by children, types of dirt and dust in the process of cotton cleaning, care to be taken regarding ginning, carding the lint and requisite conditions to be observed to make good slivers. Children were busy with their own processes and the teacher gave them explanatory talks, and was satisfied that he succeeded in giving knowledge with the activity.

3. A teacher directing the pupils to prepare a kitchen garden, tried to introduce a problem of arithmetic—finding the area of the plot—through the process of preparing the plot.

4. A teacher guided pupils to wind their yarn on winders and to count the number of rounds.

In such instances, teachers felt happy that they could achieve correlated literary training *through* the very process of an activity. They interpreted it as a process of unilateral correlation, that is to say, the activity-aspect and the literary-aspect were achieved simultaneously. Co-extensiveness and co-existence of activity and knowledge which is contained in the process of teaching, had influenced the attitude of the teachers. They failed to understand that teaching processes differ according to the types of activities, occasions and the needs of the pupils. In actual practice, however, when the pupils were busy doing the different processes of the activity and fully engrossed in them, the teachers tried to introduce literary subjects. Thus, they disturbed the concentration of the pupils, and, consequently, pupils did justice neither to the activity nor to the learning of literary subjects. Both were spoiled due to the misconceived efforts of the teachers to introduce literary contents during the process of an activity. Moreover, those subjects were introduced in an incidental manner and not drilled and fixed in a systematic and scientific way to integrate learning.

Some teachers preferred introducing literary subjects after the completion of the activity. Their logic was as follows: Introduction of literary topics, along with the process of the activity, spoils the product of the activity as well as disturbs the process of learning of children. They, therefore, introduced literary topics after the activity which they believed, would impart systematic knowledge, arising out of the practice. In this process, the shortcoming was that they merely introduced the topics, bearing direct and close relation to the activity, but they did not try to lead pupils to extend their range of literary knowledge. Let us study the following case:

5. A teacher encouraged the pupils of a higher grade to spin and to find out the count of their yarn. He only discussed the arithmetic calculations involved in the process and then left the pupils to themselves.

He did not teach them the count of yarn—along with different factors affecting the counts, the relation that exists between the quality of cotton, the process of spinning and the calculation of counts, the uses of yarns of different counts in the preparation of cloth of different types and their uses, the relation of the count to evenness and strength of the yarn etc. Thus, extension of knowledge was sacrificed, and pupils received but scanty knowledge. We, therefore, see that at the cost of necessary expansion of knowledge, integration of subjects was maintained.

There was another group of teachers who tried to introduce literary subjects, after the completion of the activity, on an extensive basis. They followed the other extreme and tried to correlate as many subjects as possible with the activity. All the contents introduced did not arise directly from the activity, and were not even integrated. In the process of teaching, there was very little correlation and much loose association of bits of information on different subjects. Teachers were inclined towards multilateral correlation, and, as a result, many short-comings —discussed earlier in the chapter—were found in their teaching methods.

In the efforts noted above, there was mere introduction of literary contents either *before, during* or *after* the activity; but in actual practice, there was very little of teaching of literary subjects to ensure literary training. They failed to realize that a mere introduction of literary information does not provide sufficient scope for the effective learning of pupils.

What Is Correlated Knowledge

To make correlated teaching of literary subjects effective, they should be integrally related to life-situations of the educand, and should be presented methodically and systematically. They should be well drilled to the pupils to ensure literary skills—just as craft processes are daily inculcated to ensure craft skills. Sufficient scope should also be given to the children to practise the literary knowledge so acquired—to enable them to develop their literary powers, and use them for improving the quality of living in a purposeful and effective manner.

Thus, misconceptions and difficulties were continued arising with regard to the following aspects of the technique of correlated teaching:

(1) The medium of correlation.
(2) The process of correlation.
(3) Items to be correlated in the process of correlation.
(4) The concept of a correlated unit and a single period unit.
(5) Different types of lessons prescribed for practice teaching work and their effects.
(6) The type of organizational work and practice of correlated teaching as a part of training.
(7) Formal teaching and correlated teaching.
(8) Place of literary training and procedure adopted to achieve it.
(9) Change of syllabii of practice teaching work and their effect on the practice of the technique of correlation.
(10) Place of drill and review work.
(11) Purpose of unilateral lessons.
(12) Difference between a 'formal lesson' and an 'unilateral lesson'.
(13) Difference between 'formal teaching' and 'formal treatment of subjects', and
(14) Organization of formal treatment of subjects in the technique of correlated teaching.

These difficulties and shortcomings of correlated teaching were experienced through practice teaching work in training institutions and through the day-to-day schooling given in basic schools. They affected the learning of pupils seriously. The system of basic education, which was found to be sound in the ideological aspect, was found to be full of difficulties in practice in the methodological aspect. Efforts to expand the scheme were made and difficulties and shortcomings of new types crept in. Teachers, workers and administrators were alive to the defects and they tried to solve them. For this purpose, conferences of practical teachers and workers were held on a national as well as on regional and local basis. The problem of correlated teaching became the burning topic of

the day and its soltuion became an absolute necessity for efficient and successful working of the scheme. Individuals as well as institutions tried to solve this problem — each in their own way.

In the foregoing chapters, the views of Gandhiji regarding the different aspects of correlated teaching, as also the historical background of the ideological and practical aspects of correlated teaching in practice have been discussed in detail with a view to getting a critical analysis of the position of the practice of the technique of correlation in basic education.

For efficient use of any technique of practice, scientific training is essential. To evolve a scientific technique of correlation and to impart necessary training regarding its correct and efficient use are some of the chief problems of basic training institutions. Such institutions are the inspiration of teachers, and their class-rooms serve as a laboratory wherein to practise the technique of correlation, learnt in the training institutions, and to utilize it intelligently and efficiently to realize the objectives of the scheme.

CHAPTER VII

SUGGESTIONS AND PRACTICAL HINTS

Organization of Practice Teaching Work

The Importance of Training of Teachers

Training teachers is a most important aspect in any system of education because the success of the system depends upon the quality of the teachers so trained. It is more so in the scheme of basic education, wherein practical rather than formal and academic training is emphasized.

For this reason, the aspect of training of teachers has been rightly stressed from the very start of the scheme. The Zakir Hussain Committee devoted a special section to it in their report, as follows:

"The proper training of teachers is perhaps the most important condition for the success of this scheme. Even in normal circumstances

the quality of the teachers generally determines the quality of the education imparted. When a radical reconstruction of the entire educational system is contemplated, the importance of the teachers who work out these changes is greatly accentuated.

It is, therefore, essential that these teachers should have an understanding of the new educational and social ideology inspiring the scheme combined with enthusiasm for working it out.

Since they are to teach not only certain academic subjects, but also crafts, their training should include a reasonably thorough mastery of the processes and techniques of certain basic crafts.

Their methods of teaching and approach to subject-matter will be different. They will deal with the various subjects, not as isolated and mutually exclusive branches of knowledge, but as inter-related aspects of a growing and developing activity which provides the focus of their correlation. For this purpose, it is essential that teachers should have some training in formulating projects and schemes of correlated studies, and thus link up life, learning and activity.

They must have an intelligent interest in the life and activities of their human environment and a thorough grasp of the intimate relationship between school and society.[1]

A number of the misconceptions and shortcomings of the scheme were due to the quality and quantity of the practice teaching work organized in the basic training institutions. The day-to-day work of the teachers greatly suffered on account of these misconceptions and mistaken beliefs. Broadly stating, they pertained to the medium, the process, the purpose of correlation and the contents to be correlated, a concept of a correlated unit, drill and review work.

The following hints are given regarding practice teaching work in basic training institutions to ensure the proper and effective use of the technique of correlation.

Suggestions regarding Practice Teaching Work

Need for Co-operation and Planning

There should be well-organized and purposeful co-ordination of work between the basic training institution and the practising school attached to it. By mutual

[1] H.T.S.: *Report of the Zakir Hussain Committee*, pp. 28, 29

co-operation, the college staff and the practising school staff should organize the detailed programme of practice teaching work bearing relation to the needs of the children and of student-teachers. While planning the educational units, different types of activities along with their sub-processes and environmental occurrences should be taken into consideration. Planning should be based on the requirements of the children, utilizing the syllabus as an aid. There should be yearly planning of educational units, which should be worked out in detail in the form of monthly and weekly units.

The planning should be the result of joint efforts of the class teachers and members of the staff of the basic training institution. Such efforts will improve the quality and quantity of work to be given to both children and student-teachers. The training college staff will contribute much to the work of planning by their insight of the technical, psychological and pedagogic aspects and the class teachers will furnish details and practical knowledge, achieved by them through their constant touch with children. Activities, along with their sub-processes and occasions arising out of life situations of children, will be selected according to the needs of development of pupils of different grades of the school. Thus, there will be a systematic and graded formulation of educational units based on technique of correlation. This type of group-planning will ensure purposeful interrelation of the work of different grades of the whole school. It will also ensure integration of work—gradewise as well as monthwise. For this purpose, detailed weekly planning of educational units and day-to-day recording of work done are essential.

The details of the day-to-day teaching work should be based on this pre-planned programme of educational units of work, but there should be no rigidity. Ample scope for freedom should be given to teachers to make necessary changes if required. Planning decides the units of educational work to be done either by a class teacher—as a part of his teaching—or by a trainee as a part of his practice teaching work.

This kind of well-organized programme of work is absolutely necessary for systematic and graded educational practice; without this, activities and occasions as media of correlated teaching will be selected at random and there will be omissions and overlapping of activities as well as of literary subjects. Unplanned work spoils the learning of children as well as the training of trainees. Well-organized and purposeful planning of work, not only ensures the systematic, graded and effective learning of children but also helps trainees to form correct concepts regarding different aspects of the technique of correlation in implementing the scheme. Practice of well-organized work will train them to plan their day-to-day work, which they will be required to do as a part of their daily teaching in normal schools, after completing the course of training.

Creation of Suitable Background for Practice Teaching Work

Practice teaching work should not be commenced before creating the necessary ideological and pedagogic background for it. The practice teaching work of basic training institutions differs from that of ordinary training institutions where the nature of practice teaching work is formal and academic. The scheme of basic education has its own peculiar objectives, and, as such, before the start of the practice teaching work, ideological and methodological aspects of the scheme should be clarified to the trainees to develop an integral attitude towards the art of teaching. Ideological and methodological aspects of basic education can be made clear, not by mere lectures, but by providing for a way of life in keeping with the principles of the system of education. To achieve this, the fundamental features of the scheme like craft training and community living should be the very basis of the organization of basic training institution, and trainees should have a scientifically planned introduction to these essential features. They should receive adequate and practical training of the processes of crafts and of community living in such an institution which should be organized as a democratic community.

Before starting their practice teaching work, trainees should receive, not only theoretical but also practical knowledge and training of the fundamental features of the scheme, which will have to be utilized by them as media of their correlated teaching. Without this background of practical training in the basic features of the scheme, trainees will fail to understand and appreciate their educational significance as media of teaching. They will practise them as mere additional items of their teaching work, and not as media of teaching. Craft training, *safai*, cultural programmes, community activities etc. are important aspects which should not be neglected. Student-teachers should acquaint themselves with how best to utilize them as a medium and process of their practice teaching work. If their practical training in these fundamental features be poor, they will utilize them inadequately, unsatisfactorily, and, at times, incorrectly in their actual practice teaching work and will thus spoil the learning of children. On the other hand, trainees possessing a sound knowledge of the basic features of the scheme will bring to correlated teaching the art and science underlying it, and their method of teaching will be a matter of joy and creative effort to them. It will pay rich dividends in improving our educational system and turning out citizens who will be a credit to India. The basic training institution should make adequate and satisfactory provision for such training to create proper educational background for practice teaching work.

This has been specifically recommended even by the Sectional Conference of the Seventh All India Basic Educational Conference held in March, 1951, which recommended that:

> Teacher-education should not consist merely of professional training, but should insist on and provide for a way of life in keeping with the principles of Nai Talim. Courses of studies for undergraduate and graduate teachers should be drawn up with the above principles in view. (Finding No. 10).[2]

Thus, the necessary background for practice teaching work, in the form of scientific and practical training

[2] H.T.S.: *Report of the Seventh All-India Basic Education Conference*, p. 86

in the basic features of the scheme, is essential for the technique of correlation if it is to be carried out rightly.

Methodological Background

To give practical training and scientific knowledge of the basic features of the scheme is one thing, and to utilize them on an educative basis as media of correlated teaching is another. In order to implement the scheme, trainees should learn, by practice, about the general pedagogic principles of teaching and learning, class management and school organization, principles and method of correlated study, the technique of conducting an educational unit centring round work, the study of the prescribed syllabus along with its objectives and implications, the importance of planning educational units and their recording. A general outline of these items should be given to trainees by members of the staff of the basic training institution before commencing their practice teaching work.

This will enable trainees to practise the methodological aspects intelligently and systematically. As a preliminary measure, demonstration lessons by the members of the staff and of teachers of the practising school should be organized. Trainees should be encouraged to observe these demonstration lessons carefully. Their observation work should be directed and supervised by the staff members and it should be followed up by objective group discussion. This will create the necessary background for starting the practice teaching work. Thus, a period of about a month or so—at the beginning of the training course—should be devoted to this aspect of student-teacher training, if it is to ensure practice teaching work on a solid basis.

Organization of the Programme

After creating the necessary background, practice teaching work should be commenced in right seriousness. Even the organization of the programme of the practice teaching work in basic training institutions has created problems. Some organized it as continuous practice teaching work, while others organized it as intermittent practice teaching work. Each type created its own problems.

It has been found that continuous practice teaching work is better—in context with the objectives of the scheme and the technique of correlation in basic education.

The system of organizing practice teaching work on an intermittent basis, in the form of scattered correlated lessons, has given birth to many misconceptions. It created the practice of giving stray correlated lessons, either of a half-a-day session or of two periods, and the practice of multilateral, co-lateral, or unilateral lessons created misconceptions regarding the interpretation of a correlated unit. The nature and type of practice teaching work, organized on an intermittent basis, made teaching artificial, incidental and ineffective. This was continued for years together, and the problem became so acute that it had to be discussed and solved on a nation-wide basis. The Sectional Conference, referred to above, observed in their findings as follows:

> In arrangements for practice teaching, the present system of giving a fixed number of lessons should be replaced by one providing for periods of continuous teaching in as many neighbouring basic schools as possible. All theoretical discussions on content and methods of teaching will be based on experience so gained. Work in adult classes should also be considered as part of Practice Teaching. (Finding No. 7).[3]

Thus, to have mastery over the art and science of the technique of correlated teaching, continuous practice teaching work is essential; more so in the practice of basic education wherein the educational process is integrated with activities and life-situation of children. The process of living is continuous, and hence practice teaching work, which is based fundamentally on the process of living and doing of children, should be continuous. The system of stray lessons created an unhealthy tendency among the trainees to interpret their practice teaching work in a very narrow sense, namely, to complete the requisite quota of the prescribed number of correlated lessons. They remained indifferent towards other aspects like observation

[3] H.T.S.: *Report of the Seventh All-India Basic Education Conference*, p. 85

work, preparation of educational units, problems of class management and school organization and their solution, study of children and the recording of work done in a basic school. Practical training in these aspects is very important, along with the practice of class teaching. Unfortunately, they gave scatterred lessons and remained ignorant of the other aspects of basic school.

The system of intermittent practice of stray and scattered lessons gave grounds for misconceptions. Trainees had insufficient contact with both children and class teachers. It has done more harm than good to children as well as trainees. On the strength of many years' experience, the Hindustani Talimi Sangh, Sevagram, while giving hints on school practice, had to recommend the following in 1952:

(1) A major purpose of this work is to help the students to a better understanding of children. Observation should, therefore, not be confined to children in school. The students should observe children at work, at play and at home, and when a larger proportion of children in the village are not attending school, the reasons should be analysed on the basis of observation. This means that 'observation' in Nai Talim cannot be confined to set periods. The extent to which a student-teacher notes the habits and attitudes of the children around him in his casual contacts is one measure of his genuine interest in children.

(2) The very nature of the educational programme of Nai Talim is such as to exclude the old practice of observing or teaching 'set' lessons on fixed subjects for fixed and limited periods. In order to share in any real way in the life of the school, whether as an observer or an assistant, the student-teacher must be with the class throughout the school day, sharing in all its activities, noting the opportunities for correlated teaching as they arise, and the manner in which the teacher uses them, and maintaining a record of the educational situation as a whole.

(3) In the course of a year's training the student-teacher should spend 3 or 4 periods of about one week each in such school practice and observation, working alongside the class teacher or under his direction.

(4) When a training centre is in touch with a 'compact area' of village basic schools, the student-teachers may arrange to live, during these periods of intensive observation and practice, in the village to which they are allocated. They will thus be able to study in school

its actual setting and see its work in relation to the needs of the village as a whole.[4]

The above suggestions clearly indicate the purpose, process and contents of practice teaching work as it should be carried out, and the method of organizing it to achieve the objectives of professional training.

Organization of Observation-Cum-Practice

Thus, two factors are essential for adequate and satisfactory provision on practice teaching work in basic training centres. The first is to have a purposeful planned programme of work and detailed organization of practice teaching work; and the second is to maintain continuity of observation and teaching practice to give the correct grasp and efficient application of the technique of correation in educational practice.

Generally, the training course for primary teachers is of two academic years, and in each year, they get about two hundred working days. Out of these days, each trainee should have at least one month of observation-cum-practice, to be organized in blocks of, say, one week's duration, during which period the normal daily time-table of the training institution should also be correspondingly modified. The following hints are given regarding the organization of observation and practice.

The first two months of the first year class should be devoted to the preparation of the necessary ideological and methodological background as discussed earlier in this chapter. During this period, junior trainees of the first year class should receive ample and organized scope for class lectures regarding the discussion of the outline of pedagogic principles and observation of demonstration lessons and class teaching done by the class teachers and by senior trainees of the second year class. They should get sufficient scope for observation of practice teaching work done by teachers, members of the staff of the college and by trainees. After creating the necessary background, their observation-cum-practice work should be commenced

[4] H.T.S.: *Revised Syllabus for the Training of the Teachers*, p. 78

along with the modified programme of work in the training institution. Junior trainees should be divided into convenient groups, say, four groups. The first and the second group should be assigned the work of continuous observation-cum-practice. Trainees of these groups should be divided into batches, each batch should be of at least two trainees, doing the observation-cum-practice work. These batches should be assigned different grades of the practising school. The same batch should not get the same grade for practice teaching work in the second term.

Group Planning of Education Units

All the trainees of the first year class of the training institution should jointly plan the general programme of practice teaching work to be done in the first month, under the guidance and direction of a member of the staff. This kind of joint planning is necessary for training them to realize the interrelation of different activities and environmental occurrences, and to plan a graded system of correlated learning by the pupils. Once this done the first and the second groups should commence observation-cum-practice.

During the period of practice teaching work, there should be a well organized programme of work in the training college so that the other courses of studies are not neglected. When the first two groups are busy with the observation-cum-practice, the third and the fourth groups will be free. The staff of the institution cannot engage them in class lectures pertaining to the academic subjects of the syllabus, for all the trainees should be present for these. Hence, the college programme should be modified for the period of observation-cum-practice. Such type of work should be assigned to the third and fourth group which would be useful to them in their practice teaching work, to be commenced shortly. As such, the third and the fourth group should be assigned the work of finishing the quota of craft work, preparing educational charts, teaching aids and completing assignments given by the members of the staff regarding the academic subjects which are covered prior to this change in the programme of work. Academic assignments should encourage them to do referential study.

Thus, we see that the important thing is to rotate the different groups. When the second group commences teaching practice, not the first, but the third group should commence observation work to maintain continuity of observation of class work of pupils. The fourth group should follow the third one and the first group should observe the teaching practice of the fourth group so that the first group can realize how much of the educational units planned in general for the whole month could be realized. This gives them practical data to compare the achievements critically for future planning and work.

The second period of observation-cum-practice should be given in the second term. On the same basis, the senior trainees of the second year class should also be organized into groups for observation-cum-practice work. There will be some difference in the quality and quantity of observation-cum-teaching practice work of the senior and junior trainees. The initial period devoted to observation work, meant for the junior trainees of the first year class—to create the necessary back-ground—will naturally be reduced for the trainees of the second year class who are familiar with it. This time should be devoted to further training in planning educational units. For this purpose, they will have to make an intensive and detailed study of the syllabus of the basic school where they will be required to teach after completing the training course.

Junior trainees should concentrate on knowing the fundamental principles of class-teaching, learning, noting the opportunities for correlated teaching as they arise and the manner in which the teacher uses them, and on maintaining a record of the educational situation as a whole, and the technique of organizing the educational unit centring round work. Senior trainees have to observe all the points mentioned above, and moreover, they should be on close and good terms with both the class teacher and Headmaster. Through this contact, they should get practical experience of both the administrative and organizational aspects of the school. During the period of observation, they should acquaint themselves with the different types of school records, along with their implications and

the methods of keeping them. They should study the system of organizing the daily routine activities of the class as well as of the school. This is important, because after the close of this year, they will return to their respective schools and will have to shoulder the responsibilities of planning the educational units yearwise, monthwise and weekwise. Junior trainees, divided into groups should be rotated—as discussed earlier—with a division of work. Modifications should be made regarding their work—if necessary. Senior trainees could be divided into three groups: the first group engaged in observation-cum-practice work, the second busy with the craft-work and assignments pertaining to academic study, and the third group occupied with the work of village contact, village survey and social education work to be taken as a part of their training.

The groups of junior and senior trainees, their numbers and allotment of work, given above, are of illustrative nature and necessary modifications are essential wherever called for. The point of emphasis is to suggest a system of organizing the programme of work of the training institution integrating all the necessary aspects of training and to organize the practice teaching work to enable trainees to achieve the objectives of the training.

Continuous Practice

Observation-cum-practice work should never be organized on an intermittent basis, but as a continuous practice, say, of one week or so. By this system of organization, each trainee, during the whole course of training of two years will get sufficient scope for continuous practice. Moreover, this system of organization maintains continuity of work and progress of all the necessary types of training pertaining to the different aspects of education as prescribed by the syllabus. The craftwork, intensive study of academic subjects, preparation of teaching aids and materials, work of village contact and social education etc. are organized integrally and continued harmoniously. No aspect of the training course is withheld even temporarily for the sake of practice teaching work. By this system of organizing work in blocks during the

whole course of training of two years, trainees get sufficient scope for planning, organizing and executing educational units under the guidance and supervision of the members of the staff to practise the technique of correlation. They come in intimate contact with children, with class teachers, with other co-trainees and members of the staff of the training institution. This helps them to study and tackle behaviour problems of children, class and school organization, purpose and methods of maintaining necessary records etc. This type of contact is very essential for practical training in the correct and effective use of the technique of correlation in the scheme of basic education.

Significance of Observation Work

For the practical training in any technique of educational practice, observation of work is as important as actual teaching work. A man learns much by observing the systematic and purposeful work of others, the prerequisites being that it should be purposeful, well directed and done under the systematic supervision of experts. Definite principles and criteria should be given by the staff members to the trainees to enable them to know what should be observed, the procedure to be adopted for observation, and the aims of observation. Their observation records should be always carefully scrutinized by the staff members, and points requiring clarification should be discussed on an individual and a group basis. This system of organized and intensive practice, prepares and trains student-teachers in different educational aspects, discussed earlier in this chapter. It guards them against misconceptions that might arise from organizational defects, inherent in work which is done on an intermittent basis. Integrated continuity of work helps trainees to form correct attitudes regarding the purpose, process, medium and contents of correlated teaching.

Importance of Group Discussions

All the members of the staff should discuss fully and fearlessly their difference in views, based on practical experience, regarding practice teaching work at a staff meeting.

They should exchange views, and discuss the pros and cons critically. After a full discussion they should come to definite conclusions and formulate common principles to be stressed while guiding, supervising and assessing the practice teaching work of the trainees. Once these principles and essentials are decided they should be carried out with team spirit. There should be frequent staff meetings for the discussion of various problems and difficulties. Difference of views expressed in an undignified, loud and indiscriminate manner harms the very spirit of experimental work being carried out in the training institution, and affects the work of the trainees.

Process of Group Discussions

First, there should be discussions of the elementary principles and essentials underlying educational practice based on the technique of correlation. This should be followed by observation of demonstration work. The next stage should be the continuous observation-cum-practice of trainees done under the guidance of members of the staff. The actual practice work of trainees should be followed by individual as well as group discussions. The limitations and shortcomings of the practice work of a trainee should be recorded by a co-trainee, by the class teacher, and also by the staff member of the training institution. The details of records of observations of each of these will vary. Generally, the points of observation of the co-trainee will be based on his own studies and the needs of his future practice teaching work. The class teacher will stress the practical aspects and the staff member will emphasize the technical procedure of the practice. After the practice teaching work, the trainee who executed the practice, the co-trainees, the class teacher, and the staff member who supervised the practice, should get together and discuss it critically and with an objective attitude for further progress.

Training through Constructive Criticism

Group discussions of practice teaching work should be educative. All those who observe practice teaching work should offer constructive criticism with an objective

attitude. The trainee whose practice teaching work is criticized should be trained to accept criticism of his work sportingly for his future progress and development. Thus, criticism of practice teaching work is essential for further development and progress.

It is, however, the duty of all the members of the staff of the institution as well as of the school to maintain the high standard and spirit of offering critical and constructive criticism enabling trainees to receive it objectively. The nature of the criticism and the spirit in which it is offered by the staff members will affect the quality of the trainee and the calibre of the trainees. If this delicate and practical aspect is not properly handled it will mar the very essence of the objectives of the training which caters for mutual understanding, mutual help and co-operation. Trainees should be encouraged to offer clear, comprehensive and constructive criticism. It should not be biased and one-sided. It should encourage them to appreciate the good points and point out the defects with a sympathetic attitude. Members of the staff should be careful to select such points as are to be discussed with the trainee, as an individual, for his further progress, and points of common interest should be reserved for group discussion on theoretical and other aspects of pedagogy.

Group Discussion as Basis of Correlated Teaching of Methodological Aspects

Each session of the continuous observation-cum-practice work should be followed by a group discussion in the class-room. The member of the basic training institution who is in charge of "training in teaching craft" should utilize common points of the group discussion as the basis of methodology of teaching, and school organization. Out of the practical experiences, difficulties and problems of trainees, he should select points bearing the psychological and pedagogical aspects of educational practice. Thus, trainees receive correlated knowledge pertaining to the training in teaching craft from their own problems in practice teaching work. From knowledge so gained they should be encouraged to solve the problems of

continuous observation-cum-practice work to be done in the following sessions, to be conducted under the guidance of members of the staff. In this manner, they get real practical and purposeful knowledge of the teaching craft, and get opportunities to utilize that knowledge to solve problems pertaining to correlated teaching, and thus improve its quality. In this way they become familiar with the correct and effective use of the technique of correlation.

Correlated Knowledge *v.* Theoretical Knowledge

Though theoretical class lectures or discussions on child-psychology, techniques of teaching, class and school management impart bookish information they do not offer any real practical or creative knowledge. The reason is obvious. The theoretical class discussion starts from the pages of the book and offers only theoretical knowledge which generally has neither the background of practice nor the opportunities for its successful application. It is received by trainees from the book and hence it remains impractical. This is one of the main reasons why the day-to-day teaching of some of the so-called 'trained' teachers, does not reflect the training received at the training institutions. Though they have received theoretical knowledge of pedagogy, they have not got the ability to utilize it successfully. But, the system of imparting practical knowledge, based on problems of practice teaching work, gives them insight and self-confidence to utilize it successfully. By offering correlated knowledge on pedagogy much of the contents prescribed in the syllabus can be given easily and effectively because it has a background of practical data. But it should be remembered that group discussions should be supplemented by well-organized class lectures to make it effective and worthwhile. Correlated knowledge and its practical application should be well drilled through the actual work of continuous observation-cum-practice work during the entire training course. Thus, group discussion based on practical data, derived from well organized and intensive observation-cum-practice, gives real knowledge and insight into the correct and effective use of the technique of correlation.

Essentials of Practical Training

Two things are essential for making the practical training, with regard to the methodological aspects, real and effective. The first is to have a well-planned and organized system of continuous and intensive observation-cum-practice, and the second is to impart 'methodology of teaching' on the real and practical foundation of the intensive practice work, and not on a bookish and abstract basis. This has been recommended on the strength of experience of many years, by the Hindustani Talimi Sangh, Sevagram. Offering suggestions for a Post-Graduate Training Course in Nai Talim, the Sangh recommends for school observation and practice as follows:

> This cannot be properly organized in a Nai Talim school on the old basis of so many "periods". A whole day's work is the unit of study, and each student should have 20-25 whole days of observation-cum-practice, organized in blocks of, say, one week's duration, during which the normal daily time-table of the college will be correspondingly modified.[5]

In the above suggestion, 20-25 days of observation-cum-practice for each student is recommended, but it should not be forgotten that it is a suggestion for the training of post-graduate trainees, whose academic calibre is higher than that of primary teachers, and that the duration of the course meant for post-graduate trainees is of one academic year; while the course meant for the training of primary teachers is of two academic years, and, as such, the training period of the practice teaching work should be modified. It is not the duration of time but the nature of the system of organizing the practice teaching work that is important. It should be organized in blocks, in the form of sessions of practice teaching work, with a modification in the normal daily time-table of the centre, based on group assignments pertaining to different programmes of work of the centre. The important point is the continuity of the observation-cum-practice and the integral

[5] H.T.S.: *Suggestions for a Post Graduate Training Course in Nai Talim*, p.6

organization of the programme of work of the whole institution. The Talimi Sangh, while offering observations regarding the training of teachers, further recommends:

> His (teacher's) professional training will centre around his observation of the work of the children, and all theoretical studies regarding child-psychology, educational psychology, methodology, school administration and organization should develop out of the problems arising from actual work with the pupils.[6]

Offering the following 'Note' regarding child-study, educational psychology, and the training of teachers it recommends as follows:

> The study of educational psychology must be based upon actual problems arising in the community life of the college, and upon definite, guided observation of the children in the school; an abstract bookish approach must be avoided. The student's knowledge of the subject will be measured by their ability to understand and handle problems of individual and community behaviour from the psychological standpoint.[7]

Thus, it is very clear that importance is given, not to mere possession of academic knowledge of educational psychology, but to the acquisition of ability, arising out of practical knowledge, to solve the day-to-day problems of the school.

Hints for Supervision of Practice Teaching

Just as the system of organizing the practice teaching differs from the traditional one, practised in ordinary training institutions, so also the system of its supervision and assessment differs from its counterpart in the orthodox system.

The technique of practising an educational unit, centring round work, offers a different basis for supervision; therefore, the points to be stressed in such supervision should be clearly understood in terms of education. These points should be observed critically and objectively

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[6] H.T.S.: *Revised Syllabus for the Training of Teachers*, p. 77

[7] *Ibid.*, p. 79

by the supervisor while assessing the practice teaching work of trainees.

Points of Supervision of Practice Teaching Work

1. Selection of an Activity or an Occasion

(A) How far was it in accordance with the calibre, interest and needs of children?

(B) How far did it possess potentialities of developing habits, attitudes, skills and knowledge of children, and to what extent did the student-teacher utilize them for educational purposes?

2. Motivation

(A) Whether motivation was made clear; if so, to what extent was its presentation natural, and helpful to the development of the educational unit?

(B) To what extent, was it realized by the student-teacher through the practice of the educational unit?

3. Planning

(A) To what extent, did it enable children to grasp the nature and procedure of work to be done by them?

(B) While discussing the details of the planning stage, were all the necessary materials needed and processes to be done properly explained by the teacher to get the intelligent co-operation of children? To what extent were the children active in planning? Did they look upon this work as their own?

4. Execution

(A) Was the demonstration-work on the part of the teacher necessary?

(B) To what extent, was the demonstration-work of the teacher a piece of model work?

(C) To what extent, did the demonstration-work help children to get a picture of the work and of the finished product to be completed by them?

(D) To what extent was the demonstration-work of the teacher observed by children with silence and understanding?

(E) To what extent, did children execute their work with interest, joy and understanding?

(F) What was the nature of the individual guidance given by the teacher? To what extent was it helpful to children?

(G) What was the nature of the observation work done by the teacher, when the children were at work?

5. Verification and Assessment of Work

(A) To what extent, did it help children to realize their merits and shortcomings? What was the effect of the process of verification on children?

(B) To what extent, was the process natural, helpful and educative?

(C) Did unforeseen circumstances arise during the process of work? If so, how did the teacher tackle them?

6. Use of Teaching Materials and Aids

To what extent, and in what manner, did the teacher utilize the following aids to develop the educational unit?

(A) Use of the black-board, questioning, discussion, narration, inspirational exposition and other teaching aids.

(B) To what extent, were their uses necessary and were they utilized by the teacher adequately and satisfactorily?

7. Nature of Literary Training

(A) To what extent, could the teacher give correlated knowledge? How far did it arise from life-experiences and life-situations of children?

(B) To what extent, was integrated knowledge given in a natural and systematic way?

8. Points regarding the Teacher

(A) To what extent, did the teaching of the teacher help integrated learning of children?

(B) What was the attitude of the teacher towards children, and towards his unit of work?

(C) How did he organize and conduct the daily routine activities, craft and other activities and environmental occurrences?

(D) To what extent, did the teacher encourage self-study of children?

(E) How did the teacher maintain his records of observation-cum-practice? To what extent were they adequate and satisfactory?

(F) Any special point to be noted by the supervisor for the teacher and his work.

Though the above points may be taken as a guide, they should be modified on the strength of practical data. The work of supervision should enable student-teachers to assess the educational unit objectively and adequately.

Assessment of Practice Teaching Work

The detailed supervision of the observation-cum-practice of each trainee should be recorded by trained and experienced members of the staff of the institution and the school. In the system of organizing the programme of work of the institution, it has been suggested earlier in this chapter that during the session of the continuous observation-cum-practice, the other groups of trainees should be kept busy with various types of work, in the form of allotted assignments, regarding the other aspects of the training course. Since the staff members of the institution would be busy organizing and executing this type of work, they naturally cannot devote too much of their time to supervising the continuous observation-cum-practice of groups of trainees. The class teachers should supervise this practice teaching work. They should do it critically, and the class teachers and staff members should discuss fully the points of supervision of the educational unit conducted by the student-teacher, and, as a result of this, they should offer detailed and comprehensive assessment of the trainee's work. Personal discussion, and remarks—written by the class teachers and the staff members, in a clear, comprehensive and objective manner—should enable the trainee to assess his own practice teaching work in detail and objectively. The nature of assessment should help

him to grasp the nature of his achievement and should offer a definite data for his future progress.

In certain institutions, it is the custom to note the assessment of work in the form of 'marks' in the books of trainees. At times, the nature of remarks and the marks given, are of a contradictory nature. This system tends to spoil the atmosphere and spirit of practice teaching work. It encourages trainees to develop a subjective attitude towards their work and creates rivalry among trainees. It tempts them to form unhealthy personal contact with the members of the staff of the institution. Instead of assessing the work, in the form of marks or symbols in the books of trainees, detailed but comprehensive and constructive remarks could be made in a report card. The nature of remarks should be such that it should enable them to get a clear picture of their work. Comprehensive remarks train them to judge their work as well as the work of others objectively, encourage them for future progress, and help them to maintain the co-operative atmosphere required for the progressive work of the basic training institution.

Thus, the very nature and system of organizing the practice teaching work, supervision work and the assessment work will affect the training of the student-teachers. It will give right attitude, insight and intelligent understanding of the use of the technique of correlation, which will be executed by the trainees, as teachers, after completing their course. The basic training institution imparts the art and science of the technique of correlation, and the class-room of the basic school offers them practical opportunities to experiment with the technique of correlation. As such, the organization of a basic school is important because it makes the practice of the technique of correlation in the scheme of basic education natural and effective.

Organization of a Basic School

The basic school is a social institution wherein on one side there are living beings—ever-growing children and teachers, and on the other side, there are teaching

materials and courses of studies. To achieve integrated relation between these aspects, and to utilize them to realize the objectives of the scheme raises problems of organization and efficient educational day-to-day practice. One of the main requirements is to create the necessary atmosphere in which to practise the technique of correlation. This demands a living faith in its ideological aspects, and a sincere and scientific effort to practise the technique in day-to-day work. For this reason, sound training with regard to ideological, methodological and organizational aspects was stressed earlier in this chapter.

The Need for a Suitable Atmosphere in the Basic School

This scheme embodies idealistic aims, and, as such, the atmosphere of the basic school plays an important part. This cannot be created by filling the environment with teaching aids and materials, or by preaching. On the idealistic basis, the interrelation of the educator and the educand, and their very process of living and doing—in a congenial atmosphere—are stressed to achieve integrated learning. The teacher should be aware that if basic features of the scheme—craft, activities of the community life, daily routine activities, and environmental occurrences etc.—are introduced and practised without the background of a suitable atmosphere, there will be waste of energy, time and money, and not much education. Children take part in many activities and gain experiences of varied types regarding environmental happenings even out of school but such experiences do not necessarily educate them. It is the selective and purposeful atmosphere, created out of the actual living of the educator and the educand, that educates them.

Thus, the fundamental requisite in the organization of the school is to create and maintain the true atmosphere of the school through well-planned and organized practice of the very activities necessary to realize the objectives of the scheme. It is the atmosphere that impels children to experience the very process of living and doing, organized on a scientific basis. This basis ensures integrated learning.

Mere practice of activities offers mechanical skills, but a scientific attitude regarding it offers the 'why' and 'wherefores', and thus enables children to develop their power of understanding. The atmosphere prevailing in the school offers concomitant learning, and enables children to develop the right type of habits and attitudes towards life through the practice of purposeful activities. As such, craft, community activities, environmental occurrences, and the daily routine activities of the school become the centre and medium of correlated and integrated learning of children.

But, unfortunately, at times, they are practised mechanically and only as a means of associated learning, in the form of presentation of topics of different subjects, at the cost of the other aspects of learning. As a result, their practice ceases to be the medium of education, and takes the form of rituals, often considered a drudgery. Daily routine activities etc., possess rich educational potentialities—if conducted on a scientific basis—but their mechanical practice does more harm than good. The following suggestions are offered to organize the daily routine activities etc., to make the technique of correlation natural and effective for integrated learning:

Daily Routine Activities and Their Implications

(1) Community Prayer

In this scheme, nothing is recommended for the benefit of a single individual. Everything is for the welfare of the community—to develop the habit of co-operation and co-work. The commune with one another through work is the guiding principle, and, as such, the basic school starts with community prayers. Teachers and children assemble together and start the day with prayers—in a serene atmosphere. This practice is educational. They learn about the significance of prayer, and the need of individual and group behaviour to be so adapted for the good of all. It also gives them a type of associated learning —for its regular and well-organized practice offers them music, and a worthwhile message in simple language—for

the betterment of life. Mere mechanical recitation of the prayer has no meaning. It should be intelligently understood and put into daily practice—if it is to be truly effective. The prayer-songs become the basis of recitation for little children, and, gradually, they become the basis of the study of music and language for older children. Prayer songs should not be changed too often. Their music, message and language should go to the very heart—so as to enable them to experience the message and effects of the community prayer in everyday life. It also offers concomitant learning since it helps children to realize the significance of the serene atmosphere prevalent during the community prayer. It enables them to concentrate their mind, and to feel and think of the self while communing with the All Pervading Power of the Universe. It creates a prayerful attitude in them. This helps to develop spiritual censciousness of an individual as an integral part of the Universe.

Very often, community prayers are held in schools without creating and maintaining a true atmosphere. The reason is that the teachers and students assemble together, not in the form of a self-controlled community but in the form of a group. They join the prayer when they like and disperse as they like. They evince individual as well as group indisciplined behaviour. Even during the process of prayers, their minds wander and bodies move to and fro, and the students talk and play mischief among themselves. This proves that one of the nobler features of the daily practice is executed in an unworthy atmosphere and in an improper manner and consequently the school community fails to realize the implications inherent in the activity.

Teachers are not critical of this state of affairs. They are content with the outward manifestation of community prayers and they make it the basis of their moral preaching or of imparting associated information. Thus, in the school, a mere outward form of the community prayer is introduced as a ritual without the background of the necessary atmosphere and a disciplined procedure. It is practised not as a medium of improving the very quality of living but as a means of presenting academic

topics of the syllabus and as a daily routine activity, done mechanically. It proves that a well-conceived and essential feature of educational practice, if followed improperly and in an unworthy atmosphere, kills the very spirit of the idea of having prayers.

The problem of late comers to the prayer meeting is one more source of anxiety. In the assembly, a definite place should be allotted to those who come late for prayers. The teacher or the taught who happen to be late should go to that assigned place. It would be the attitude and the atmosphere of the whole community towards that place which will make late comers feel unworthy. Then, they will be impelled to be punctual. The duty of the organizer is not to be angry with them but to create the right atmosphere for prayers and a consciousness among all not to be late.

There can be the school prayer as well as the class prayer according to the calibre of children. Teachers should collect and preserve prayer songs in the form of prayer-books for children of basic schools. Teachers should see that a reverential attitude towards the great personalities of the world, and the fundamental principles of good living —enunciated by different religions—is stressed. The spirit of narrow sectarianism should not be developed.

(2) The School Assembly

After the community prayer, the different elected heads of the school community announce their requirements and give the necessary instructions. Along with this, a system of giving current news is also practised in basic schools for making children conscious of the happenings in their own environment and the world at large. Current events can be given to the whole school in general terms and to the class in detail. Children should be made eager to know about current events and their implications. The daily calender can be explained to children. This gives a good opportunity to teachers, particularly of the higher grades, to introduce correlated knowledge regarding the happenings of the day. For example, the presentation of the daily calender regarding the 22nd December or the

22nd June affords opportunities of giving correlated geographical knowledge. Birth or death anniversaries of great men afford scope for associated learning.

But a mere narration of them will not be sufficient. A proper atmosphere in the school should be created to impart integrated learning. Selection of current events should be according to the needs and mental ability of pupils. The teacher should start from the known to the unknown, from the near to the distant. It should start with events of local interest, extending to those pertaining to our country, and then to the world in general. Events of joy or sorrow of the members of the community will create similar feelings in the children, and a desire to sympathize with them or help them. For example, an accident to, or sickness of one of the community members or of their relatives, will stir children to be of service to them. In the same way, news regarding the brilliant success of any one of the community will excite the whole community and make them feel proud. It will inspire others to follow him. The point of emphasis is to introduce such current events as will stir the finer emotions of children for nobler actions.

The teacher should know the difference between the right kind of news for adults and children. The selection and presentation of current events should be based on the psychological interest of children. Such information as is given should be carefully and regularly recorded. Thus, every basic school can have its own Current Events Bulletin. Current events, if properly selected and presented are an aid in stirring the finer emotions of children and impelling them to deeds of service and sacrifice. They can also widen their horizon, and increase their general knowledge.

(3) Review of Work Done

In some schools, it is the practice of reviewing work done. In an assembly a few minutes are allotted to it. From the primary grade I to grade VII children are encouraged to briefly state what was learnt the previous day. It serves a twofold purpose: Children get practice in

revision, and they also learn to express clearly the contents of what they have learnt. This system, if properly organized gives ample scope for revising items of learning daily, and it offers opportunities to teachers to know about the inter-relation of work and its gradation.

Tactful teachers can introduce healthy competition among children and thereby encourage them to express themselves correctly and effectively. For those of lower grades, it may be a piece of oral work; for older pupils it should be written work. Older children should also be encouraged to keep a regular record of their work. Children of basic schools should be trained in the art of planning, executing and recording their work and of keeping accounts of their time along with items of work done. The teacher should explain the purpose, the method of recording and the attitude in which it should be kept. This practice helps children to record details of their regular study and work and thereby gives them opportunities to revise them. It also trains them for clear and comprehensive self-expression. The records will enable teachers to study the quality and quantity of the work done by children, as well as to size up their attitude towards the different types of work. The dairy of children should be regularly scrutinized by teachers to achieve the purpose of training.

(4) The *Safai* Programme

Activities pertaining to the *safai* programme bear special significance in the organization of the basic school, as people have a poor sense of civic cleanliness. This factor has affected the health, happiness and wealth of the individual as well as of the nation. There should be a gradation of the activities undertaken in this programme—according to the age, interest and ability of the pupils. A beginning should be made with how to keep the body, dress and things of personal use clean. Great care should be taken by the teacher, while dealing with little children, to enable them to form habits of personal cleanliness. Self-efforts to keep themselves their things and surroundings clean, neat and tidy should be encouraged. Their progress

should be recorded with the purpose of assessing the development of their ability in this respect.

Gradually, their training should be extended from personal to environmental, social and civic cleanliness. This activity offers primary learning in the proper handling of materials to be used, and care to be taken of them, while doing *safai* work. It offers associated learning and correlated knowledge pertaining to health, sanitation, diseases and their causes and effects, and also scientific remedies to combat them. It offers concomitant learning in developing a positive attitude towards the need for cleanliness, which should be achieved through well-planned and organized activities in the search for good health. This attitude will inspire the students to maintain cleanliness and to help and encourage others to do so.

The teacher should observe and record the *safai* work of children along with their attitude towards it. Merely getting children do *safai* work is not as important as creating and developing the right attitude towards cleanliness for the practice of *safai* in the scheme of basic education.

It has been observed that in some schools the *safai* programme is observed as a ritual, and is practised mechanically during certain set periods, and is forgotten after they are over. This mechanical and unsystematic method of practice has no real or lasting effect on the students. Therefore, teachers should aim at developing a desire for cleanliness at all times. If it works actively, an atmosphere of cleanliness will always prevail, and, gradually, the necessity of the *safai* programme will decrease, because there will be an increasing group consciousness to keep everything clean and orderly. The important thing is not merely cleaning things or surroundings ever so often, but maintaining them clean day in and day out. This aspect should be thoroughly drilled into the children so that the habit of cleanliness becomes second nature to them.

Each child should be trained to realize that to be clean and to help others to remain clean is a social obligation. To remain unclean and to keep surroundings unclean

should be treated as a social crime by the conscious community. To foster this attitude is the purpose of correlated learning given through clean living.

But it has been observed that in some schools the *safai* programme is practised daily without the background of the necessary atmosphere. *Safai* work is not recommended merely as a means of correlation of knowledge of subjects of the syllabus, but of reconstructing the way of living. Through the *safai* programme, correlation is to be achieved but it should be in the form of a salutary change in the attitude of the individual as well as of the community towards living, and to fuse this spirit of cleanliness in their homes and surroundings. For this, it is very important that the medium of correlation is not "talk and chalk" of "preaching or teaching" about cleanliness from the pages of books but is the very process of living itself—in and outside the school.

(5) Aesthetic Activities

It has been observed that decorating the surroundings of the school has been greatly stressed in day-to-day practice, as it deals with the aesthetic aspect of life. As such, it is right that it should be carefully encouraged. Children should be trained in the art of decoration through the use of simple and local objects, artistically presented. Different ideas for beautifying the school—either written or drawn by the children—should be preserved in a booklet, along with the name or names of those who have submitted them, and the date. Every school can prepare its own booklet of decorations compiled from the designs prepared as a part of the aesthetic activities undertaken during the daily routine work of the school. This booklet will impel them to healthy competition and encourage them in creative and artistic self-expression. This aspect of daily routine activities provides for primary as well as associated learning in the form of acquisition of skills, and knowledge of different ideas for decoration, and an appreciation of beauty.

Unfortunately, in some schools at the set period of the day, children bring green leaves, coloured flowers etc.,

and decorate the surroundings, draw designs, write maxims and proverbs on walls and floors with coloured chalks. It is indeed a tragedy to see that immediately after the period is over, the teacher and the taught walk over the decorated floor and make the place untidy and unbeautiful! This proves that a reverence for decoration has not been created and developed. In fact, its preservation should be considered to be the duty of each and every member of the community. Thus, activities of decoration should not be treated as merely means of correlating knowledge of drawing, geometry, language etc., but should be a medium of creating new values, and a taste and reverence for the aesthetic.

(6) PRESENTATION OF 'THOUGHT FOR TODAY'

In basic schools, the practice of introducing maxims, proverbs or good thoughts is observed. Teachers either come prepared with them or make children find them and introduce them in the class. The selection, method and purpose of presenting them require careful consideration. Generally, teachers present mottoes etc. on the walls of the class-room to impress visitors. At times, they are Greek and Latin to children. The reason is obvious. The teacher's attitude is of decoration and not of education. They are selected—neither from the life of the children nor for their progress. Just as grammar should evolve from the language of children and should affect their language, in the same way, good thoughts should be taken from their life and should influence the very process of their living and behaviour. The teacher should select them, not from the pages of books, but from the pages of their life. Thus, the activity of presenting good thoughts influences the very living of children. The success of the teacher will depend on the extent to which he encourages children to translate them in day-to-day living. By this system, good thoughts will not be many in the list at the end of the year, but the teacher should not feel shy of it. He should not change them till he is satisfied that adequate scope of practice has been given to children for their assimilation. Thus, they will be a few in number, but of

practical importance and of immense significance. It will give an index of progress of children with regard to character formation. The fundamental thing is to create an atmosphere and true attitude for its study and practice. The teacher should create consciousness and firm determination among children to live according to the implications of good thoughts.

Just as there is community prayer, community *safai* and spinning, so there should be community living based on good thoughts selected for practice. This practice can help teachers to solve problems of class and school management, discipline and freedom. This system directs children to correct their behaviour and offers associated learning in the form of themes of language-study or the study of the lives of great people. It also offers concomitant learning in the form of creating consciousness of self-improvement and development while living in a well-organized community.

(7) Community Spinning

Community spinning has become one of the daily routine activities of a basic school. It is also practised by children as well as by adults on ceremonial occasions like Gandhi Jayanti, Sarvodaya Day, i.e. 30th January as well as on days of national importance. A proper atmosphere is very important for this activity in order to realize the objectives of the programme. It is symbolic, and it implies a new purpose and a new procedure of work. The school community should practise it on a social basis. This activity is symbolic of the creative and constructive manual labour done in a serene atmosphere. The yarn spun by an individual in the community spinning is symbolic. It represents the idea that all the members of the community should commune with one another through work, carried on for a common purpose. Its implicit message of self-reliance, development and service through work, done on a community basis, should be made clear to children. Occasionally, such spinning should also be organized to train them to work in a group. Teachers should impress

upon the children the need to maintain a proper atmosphere and attitude during community spinning. In the absence of these precautions, this important activity is likely to be reduced to a mere ritual, taking a form of physical activity wherein manual labour is manifested in the production of yarn, and the school would be simply a group of people assembled together to produce yarn. This spoils the spirit of work and does harm to the cause of education.

It has been observed that in some schools, instead of community spinning, group spinning is practised and that too, in an unbecoming environment of noise and disorder. Serenity of atmosphere, insistence on the procedure of work, skilful spinning and tidiness help to develop the right attitude in children for community spinning. This offers immense scope for concomitant learning. Gandhiji had rightly stressed this aspect and said, "One hour spent in spinning should be an hour of self-development of the spinner." Thus, community spinning is decidedly something more than a mere outward manifestation of manual labour.

The concomitant aspect based on idealistic considerations dignifies the activity of community spinning. The technique of correlation can also be realized by well-planned daily practice. It also affords scope for primary and associated learning in the acquisition of skills in spinning, and correlated knowledge of arithmetic, social studies etc. The practice of community spinning should train children to work in a group with discipline and purpose.

Integrated Learning through the Technique of Correlation

From the above discussion it can be seen that mere activities are not important in the scheme. The environment in which they are being practised, motivation behind their practice, points of emphasis, methods of practice and the integral effects of the practice on children are essential for the practical working of the technique of correlation. This should be remembered by teachers for

organizing and executing any programme of work, taken as an educational unit of work. An illustration will clarify the point. While the creative and recreational aspect is to be maintained in any programme of recreation, yet the educational aspect of re-orienting the value of recreation, the criterion of selection of contents and types of activities meant for recreation, and the method of their presentation, etc. is also important. Through the recreational programme, likes and dislikes of children and people are to be moulded, and the standard of recreation is to be raised. Thus, to summarize the discussion, it can be said that:

(a) An activity practised as merely an activity cannot be the medium of education. It should be practised with its corresponding atmosphere to achieve integrated learning of children.

(b) The very quality of living of teachers, their attitude towards the work and towards the children have a positive influence in the creation of the atmosphere required for the practice of the technique of correlation in a basic school. Faith in objectives, sincerity of purpose, professional training and intelligent practice contribute much towards creating and maintaining the requisite atmosphere. The atmosphere of the class as well as of the school helps much towards the acquisition of concomitant learning in the form of habit and attitude formation.

(c) An activity organized and executed in educational practice, with the proper atmosphere, should be utilized fully as a medium of integrated learning of children. All the three aspects of learning—primary, associated and concomitant—should be attended to and realized through an activity, done in the right atmosphere as a process of educational practice.

No doubt, in the beginning, there will be more of primary learning in the form of acquisition of basic skills but, gradually, there will be more of associated learning in the form of correlated knowledge; then there will be concomitant learning in the form of habit and attitude formation and reorientation of values. This gradation, explained above, is given to clarify the process and purpose

of correlation. In actual practice, it should not be followed mechanically. As a matter of fact, in learning, all the three aspects of learning, in more or less degrees, take place, and they should be intelligently and integrally attended to and observed. At no time, should one aspect of learning be achieved at the cost of the other aspects. The point of emphasis is the integral approach. There will be a difference in the degrees achieved in these aspects, but at no time, will there be total absence of any one aspect. This will make clear that activities undertaken in a proper atmosphere should be utilized as media of imparting integrated learning to children.

The practical aspect of organizing the day-to-day work of a basic school has been discussed in detail, because it has been observed that though the theory of the technique of correlation sounds ideal, yet its practice has created problems and difficulties. In actual practice, mere activities were pursued without taking care to create and maintain the right atmosphere in which to undertake them to realize the objectives of the scheme. Moreover, to achieve correlation, all types of school activities necessary for the harmonious development of children should be fully and integrally utilized. Generally, daily routine activities, though possessing rich educational potentialities, are practised mechanically. Activities, practised without the necessary atmosphere, were generally utilized either for the correlation of the primary aspect of learning or as a means of the associated aspect of learning in the form of correlation of knowledge. Very little attention is paid to concomitant learning which is greatly stressed in the objectives of the scheme. There is generally absence of integral approach of teachers for the practice of the technique of correlation, and this creates problems, difficulties and shortcomings. One of the chief reasons for this is the quality and quantity of training received by teachers in the practice of the technique of correlation during their training period. Both these aspects—training of teachers and the organization of a basic school—are discussed in this chapter because they affect the technique of correlation in actual practice. There are also other practical factors affecting

the use of the technique, and they are: the syllabus, the time-table and examinations. They affect the practice of the technique of correlation considerably, and as such they are discussed in the next chapter.

CHAPTER VIII

FORMULATING A SUITABLE CURRICULUM

For the efficient working of any scheme of education, the ideological, methodological, organizational and curricular asspects must be clearly understood, and rightly interpreted. They are interrelated and inter-dependent. Ideological aspects are of an abstract nature and they offer objectives to be realized. They indicate the goal of pursuit. Methodological aspects give the art and science of the technique of procedure to be adopted in day-to-day practice. They are of a practical nature and affect the day-to-day process of work. The organizational aspects affect the atmosphere which gives a background in which to practise. These three aspects have been discussed in the foregoing chapters. The last but not the least is the curricular aspect which offers the contents of education. This aspect offers the actual material to work with and indicates the standard of attainment to assess the progress of pupils. In the field of education, on one side, there are the objectives to be realized; and, on the other, there are courses of studies to be practised in daily schooling to realize those objectives. Courses of studies are presented in the form of contents of education. In between these there is the aspect of methodology which is of a functional nature and correlates the objectives and contents of education. It is the experience of educational workers that the curricular aspect either hinders or helps the functioning aspect of the method and consequently affects the process of realization of the objectives of the scheme. The curricular aspect offers concrete subjects of study either in the form of knowledge of radical experience or in the form of actual experience of the educand. With these, taken as a basis, the functioning aspect has to be utilized in daily

practice. From this point of view, it is necessary to know the background of the curricular aspect. This helps us to understand to what extent the nature of the curriculum, its interpretation and practice help or hinder the efficient working of the technique of correlation in actual practice of the school.

The Historical Background of the Curricular Aspect

In the field of education, different ideologies and trends have affected view-points in selecting and organizing the contents of the curriculum.

In the traditional system, education was being conceived as training in skills like reading, writing, counting and of acquiring mastery over certain areas of knowledge. The teacher was expected to train pupils to realize the educational objectives, decided by the ideologies and trends governing it. For this purpose, a curriculum was drawn up. It provided the necessary contents of practice to help pupils to gain skills and knowledge. The nature and types of skills and knowledge differed from time to time according to the ideologies and trends that were prevalent. This in turn, affected the selection and construction of curricular contents.

Traditional View of the Curriculum and Its Purpose

Emphasis regarding selection and construction of curricular contents differed but the method of interpreting the curriculum remained the same for a long time. The mechanical concept of the curriculum relegated the child, the learner, into the background, and stressed the acquisition of curricular contents. The curriculum was interpreted in terms of subjects.

In actual practice, it was taken to be an outline of the subjects to be studied, with indications of the extent of their study, during a specified academic session. The identity of th e academic subject with the curriculum was arbitrary. The school, as a part of its work, tried to acquaint its pupils with the past experience of the human race. The vastness of human experience necessitated its division into subjects for proper understanding and convenient handling. Subjects were nothing more than appropriate labels put on human experience after proper

analysis and classification. Classification and gradation were highly logical and were done by adults for the education of children. Such divisions of human experience into subjects was found convenient by teachers for description and comprehension of the area of knowledge, expected to be mastered by pupils in any particular grade. This system also helped them in dividing the task of teaching amongst themselves by taking up a well defined and clearly demarcated areas of knowledge, known as a subject.[1]

It gave dominance to teachers and ease in handling their work, and mutilated the active nature of growing pupils, eager for rich experiences in their educational practice. This interpretation and practice of the curriculum lasted for centuries and reduced education to a mere mechanical memorization of subject, to be achieved by pupils, mainly relying on books. In extreme cases, education became sheer verbalism and had little relevance either to the present or the future needs of pupils and those of the society. This traditional view gave priority to the teaching of the teacher, offered a concept of discipline, imposed from without and gave class and school organization and administration a dictatorial nature. It treated the child as a living machine to acquire, at any cost, the skill and knowledge presented through the agency of the curriculum and given under the dominating influence of the teacher.

Trends of Unifying the Curricular Contents

Reactions set in, and the naturalistic trend in education made the process of education child-centred. *Paidocentricism* became the principle of educational practice. Rousseau, Pestalozzi, Froebel, Montessori and other educational thinkers and workers devoted their life to make education child-centred. As a result of their efforts, the stiff mechanical concept of a curriculum gave way to a liberal concept. Yet, in actual practice, the traditional method of interpreting and carrying out the contents of the curriculum in terms of subjects continued for many years. Along with this tendency, many new trends began

[1] *Principles and Practice of Education* by Lal & Chowdhary, pp. 117-20

to work in the world. The age of scientific research, the industrial revolution, the democratic concept of men and of society etc. created new problems and affected the field of education. Not only greater knowledge about human race, but also new contents of knowledge and skills required by this modern age, were considered to be important as curricular contents. Thus, the nature and type of knowledge and skills which were to be acquired by the child in education were changed and increased in number. Curriculum construction became a process of accretion and had to provide for human racial experience as well as needs of the age. On one side the tendency of accretion worked and on the other, the *paido-centric* tendency and knowledge of child psychology. To meet the situation, educational workers tried to evolve a technique of educational practice with the help of which more curricular contents could be given to the child in an interesting and effective way. Efforts were made to unify curricular contents and to teach them in a correlated way. The core of integrating the curricular contents differed according to different ideologies of educational workers.

In modern times, not merely correlated teaching but also correlated learning is emphasized and that too, to a greater extent because the concept of education has radically changed. Now, education is not a mere acquisition of knowledge through rote learning but is the modification of human behaviour required for the harmonious development of the personality, which is to be achieved through the actual process of living in a well organized school community. It is also realized by educational workers that this modification of behaviour can come about only through the direct experience of pupils, and the curriculum has to make provision for it. Thus, the concept of curriculum became liberal, and the process became child-centred. Instead of verbal matter, provision for rich experiences of the growing child is made and there is inter-relation between curricular contents and technique of teaching.

In any good system of education, curricular contents, methods of teaching and outcome of education should be

interrelated. The curriculum deals with the structural aspect in the form of contents of educational practice, and the actual process of educational practice deals with the functional aspect. Both these aspects affect each other considerably and the outcome, naturally, depends upon the insight and experience of organizing, presentation of the curriculum and efficiency of translating it into day-to-day practice. For basic education, the first syllabus prepared by the Zakir Hussain Committee charted the objectives of the scheme, recommended the process of correlated teaching on a hypothetical basis, suggested the subject-wise presentation of academic subjects, and stressed craft as the centre of education. This affected the functional aspect of the scheme.

The syllabus of the Hindustani Talimi Sangh, Sevagram, prepared in 1946, was of practical nature, based on actual data of work, but it over-emphasized rural atmosphere, and this obstructed the proper functioning of the scheme in many areas.

Independence presented an urgent need to re-orient the system of education on a nationwide basis. Pamphlet No. 70 of the Central Government of India, though of the advisory nature, gave an outline and the procedure and method of educational practice, to be followed in basic schools.

The syllabus of the State of Bombay, prepared under the guidance of the Board of Basic Education of the State, is constructed on the data of experiments and critical observation of the scheme at work, and has offered a detailed programme of practice of curricular contents. The presentation of the contents is conducive to the technique of correlation, as activities arising out of the living of children are recommended. The detailed programme of correlated studies for day-to-day schooling should be evolved out of the syllabus, and it should be done on the basis of experimental work, carried out in the day-to-day practice of basic schools. Such efforts are being made on different levels by individuals and Government and non-Government institutions.

Practical Suggestions in Framing a Syllabus

Now, in the field of basic education, the stage has come when the methodological aspect is to be worked out in detail and scientifically, to evolve the art and science of the functional aspect of the technique of correlation which is essential because it is a system of educational practice which aims at educating a child for life, and through life. 'Through life' implies correlation. Through the very process of living and doing, organized by the school, the child acquires skills, habit, knowledge and attitude for his future life.

Thus, the syllabus of a basic school should start with the very experiences and life-situations of the child and should offer systematic practice of creative and constructive activities.

Basis of the Syllabus of a Basic School

The syllabus should present, not the bookish contents of racial experience but should present creative and constructive activities pertaining to the child's life and the life of the people around. But the real difficulty arises in selecting contents of this type. What type of activities and situations in the child's life should be selected and encouraged with the purpose of offering him rich experiences? Secondly, how should they be organized and practised to realize the objectives of the scheme? These are practical difficulties in the formation of a syllabus for basic schools. For this, it should be remembered that the scheme synthesizes modern trends in education, and this will help us to select, organize, present and practise the curricular contents, for which the curricular contents, ideological, methodological and organizational aspects should be taken into consideration, because the scheme is itself the result of the philosophy of Gandhiji which aimed at an all-round and practical education for our people, based on the principles and needs of daily living. This has been rightly stressed by Dr. M. S. Patel, in his study of the educational philosophy of Mahatma Gandhi. He writes:

It is Naturalistic in its setting, Idealistic in its aim and Pragmatic in its method and programme of work. To emphasize one aspect of his philosophy to the neglect of others is to see only a part and identify it with the whole.[2]

Thus, creative and constructive activities as curricular contents are to be selected with the purpose of offering rich experience to a child for his education. As such, it should be based on naturalistic lines.

Activities to be Expressive of the Innate Nature of the Child

The content of the curriculum, as education proceeds, is to be selected from different activities of real life, the determining principle being the natural interests of the child at the successive stages of his development. These interests are classified by Dewey as follows:

A fourfold analysis of the natural interest of the child: the interest in conversation or communication; in inquiry, or finding out things; in making things, or construction; and in artistic expression.[3]

This gives a clue for selecting activities as curricular contents. Activities are not to be forced upon the children from the standards of adults. They should give ample scope to channelize the innate tendencies of communication, inquiry, construction and artistic self-expression of the child. Thus, they should be expressive of the innate nature of the child.

Idealistic Basis in Selecting Activities

Though the naturalistic basis should be taken into consideration when selecting activities, yet it is also true that any and every activity, in the name of self-activity of the child, is not sanctioned by the idealistic aim of the scheme. Moreover, principle has been accepted that the elements of the curriculum should not be of the nature of formal and verbal matter, but should offer practice of

[2] M. S. Patel: *The Educational Philosophy of Mahatma Gandhi*, p. 179

[3] Ross: *Groundwork of Education Theory*, p. 197

activities as a means of the self-expression of the child. The activity principle is accepted, but the difference lies in the criterion of selection. This point has been stressed to clarify that the curriculum of basic education should be activity-centred but the idealistic aim of the scheme should not be lost sight of while selecting the activities as curricular contents. This difference has been overlooked by some workers, making basic schools equivalent to activity schools. Though both types of schools accept the activity principle, yet they are fundamentally different in selecting, organizing and practising activities. This difference arises out of the idealistic aim of the scheme. From this point of view, it is worthwhile to know the difference between an activity school and a basic school.

Difference between an Activity School and a Basic School

The activity curriculum practised in Western activity schools and the basic curriculum have points of fundamental difference which have a far-reaching significance. Some of them are given below:

Activity School	Basic School
1. Even passive concentration in listening to music or a story may be an activity.	1. Activity always involves the physical and intellectual aspects simultaneously.
2. Education through activity.	2. Education through productive and socially useful activity.
3. Activity for exploiting the creativeness of children.	3. Culture through craft — creative and constructive manual labour—which is both productive and remunerative, wherein lies the genius of Gandhiji.
4. Activities leading to immediate results. Impatience for results.	4. Activity merging into the life of an individual as well as the community.

5. Activity to end in pleasure and success.	5. Children learn to realize that there shall be no pleasure without some adequate effort.
6. Physical comforts are stressed.	6. Aspires for higher values beyond one's self.
7. Wants of pupils are increased.	7. Teachers and children to minimize their wants.
8. Activity chosen to suit the centres of interest.	8. A continuous activity related to the basic needs of life. "Craft-work, in order to be educationally effective, should grow into purposeful work. Craft as a medium of education is not allowed to deteriorate into careless and purposeless activity".
9. Unco-ordinated activities, without any mutual relation.	9. More stress is laid on a single basic craft which has many-sided interests and the two centres of environments.
10. Activity for the joy of life.	10. Activity taken up to realize the dignity of labour as the basis of individual as well as social life.
11. Activity pursued as a hobby.	11. Activity as austere self-discipline.
12. Activity directed mostly for individual benefit and development.	12. Activity directed towards developing a child into a noble, unselfish person.

These points of difference clarify the criteria of selection, presentation and practice of activities as contents of syllabus. The idealistic aim differentiates the activity-centred curriculum of the basic school from that of the activity school. It does accept the activity-principle for the structural aspect, but does not accept the method of

selection, presentation and practice as is carried on in an activity school.

Syllabus for Basic Schools on a Regional Basis

To maintain naturalness and effectiveness of the integrated process of correlation, the experimental attitude of the pragmatist should be observed. Teachers of basic schools, and of practising basic schools attached to basic training institutions, should keep faithful and comprehensive records of their day-to-day educational practice. On the data of these records, a programme of detailed and graded correlated studies should be evolved. Regional committees, consisting of experienced and trained basic teachers, members of the staff of the basic training institutions, and other educational workers and thinkers should be constituted to evolve such a programme, based on actual scientific data from schools. These committees should evolve a tentative, but detailed, and graded programme of correlated studies giving full liberty to basic teachers to make necessary modifications regarding the details of work when and where necessary. But teachers should keep a record of these modifications, along with their reasons, and communicate the same to the respective regional committees. This type of work should be allotted to practical teachers and workers and not to theoretical experts. Such a syllabus would contain purposeful activities for the integrated learning of children. Thus, to achieve integration of the structural and functional aspects, a practical scheme of detailed and graded programme of educational practice is essential. Well-selected subjects and their organized study, put into practical effect, will supplement the effective use of the technique of correlation which aims at the integrated training of the child.

Thus, the detailed syllabus of education, meant for life and to be practised through life should be synthesized in organization and integrated in practice. It can only be evolved out of faithful and comprehensive records of work of teachers who practise the scheme daily. Besides the structural aspect of the scheme, there are other aspects of a practical nature which bear relation to the functioning

of the technique of correlation. A new outlook should be developed for framing the time-table, keeping of records and assessment work to facilitate the practice of the technique of correlation on a scientific basis.

Need of Change of Outlook regarding the Time-Table

The scheme of basic education stresses class teaching, in the form of well-aimed and organized community work practised as an educational process. For this, a time-table is essential, and its nature should be conducive to the practice of correlated studies. The technique of practice emphasizes the need for planning as well as for organizing the programme of work. Teachers should have a detailed weekly plan of work to achieve inter-relation of practical curricular contents, and graded and integrated learning of children.

Time-Table to be Activitywise, and not Subjectwise

The nature of the time-table for a basic school will be fundamentally different from that of a traditional one. It will not be subjectwise but according to the units of work which are to be practised for the integrated learning of children. It will be projectwise. These projects will be in the form of units of creative and constructive work taken as a basis of day-to-day educational practice. It should be so framed as to plan and complete projects or activities within the scheduled time along with the necessary integrated learning. Instead of a set time-table of subjects, it will be necessary to have a time-table of projects and activities varying from month to month. Each teacher should keep a record-book wherein a detailed plan of work and the record of work done is shown. Weekly planning as well as the daily recording of work should be presented projectwise as well as subjectwise for the guidance of the teacher to know the progress of children in various branches of curricular contents.

Planning and recording of details may be subjectwise but the learning of pupils should be integrated as a whole, and the method of presenting knowledge should be organized. It should be clearly understood that in basic syllabii,

subjectwise presentation along with allotment of time is given for the guidance of teachers and not for its mechanical presentation and practice in the class. There should be a reorientation of approach to the former rigid time-table. This indicates a need for the right type of interpretation and practice of the syllabus. The time-table should have psychological and practical significance. It should be of a flexible nature, varying according to the needs of children and their environment. But flexibility in the time-table must not be interpreted as licence to do anything and everything at one's own sweet will. Punctilious observance of certain essentials of educational practice should be intelligently maintained even in a flexible time-table. For example, daily routine activities etc., either of a residential school or a day-school should be practised punctually to foster the habit of regular practice in the essentials of daily life.

Keeping in view the integrated practice prescribed by the syllabus, the time-table of a basic school can be framed on a broad basis as follows:

The school should run in two sessions—morning session from 8-00 A.M. to 11-30 A.M. and afternoon session from 2-30 P.M. to 5-30 P.M. These timings can be modified according to the needs of children and of society. Generally, the morning session is favourable for outdoor activities, crafts etc.

Timings of a Day-School

8-00	A.M.	to	8-45	A.M.	Community prayer, assembly, *safai* and other daily routine activities
8-45	,,	to	10-00	,,	Craft and/or other environmental activities
10-00	,,	to	10-10	,,	Recess
10-10	,,	to	11-30	,,	Integrated knowledge arising out of the activities or environments of the child. (The teacher should plan the details of work in his weekly planning.)

11-30	A.M.	to	2-30	P.M.	Break
2-30	P.M.	to	3-00	,,	Community spinning
3-00	,,	to	4-20	,,	Drill, review-work, expressional work of children etc.
4-20	,,	to	5-00	,,	Supervision of self-study of children
5-00	,,	to	5-30	,,	Physical education

Timings of a Residential School

5-00	A.M.				Rising
5-00	,,	to	5-30	A.M.	Personal duties
5-30	,,	to	6-00	,,	Morning community prayer and assembly
6-00	,,	to	7-00	,,	Community *safai* and other community duties and breakfast
7-00	,,	to	7-30	,,	Bath etc.
7-30	,,	to	8-00	,,	Self-study
8-00	,,	to	11-30	,,	Class attendance
11-30	,,	to	12-30	P.M.	Community kitchen duties, meals etc.
12-30	P.M.	to	1-30	,,	Rest
1-30	,,	to	2-30	,,	Self-study of children
2-30	,,	to	5-30		Class attendance
5-30	,,	to	6-00	,,	Personal recreative work
6-00	,,	to	7-30	,,	Community kitchen duties, meals and rest
7-30	,,	to	8-00	,,	Community prayer
8-00	,,	to	9-30	,,	Self-study of children
9-30	P.M.				Going to bed

Discussion of the Time-table of a Basic School

The outline of the time-table of a basic school is given above. The first forty-five minutes are devoted to community prayers, assembly and daily routine activities. They should be conducted in the proper atmosphere as

discussed in the chapter VII. After this, seventy-five minutes i.e. from 8-45 A.M. to 10-00 A.M. are allotted for daily craft-work, kitchen gardening or agricultural work etc. The different craft processes should be well planned and organized in detail by the teacher in his weekly planning to maintain the progressive sequence of activities, to impart primary learning and skills in craft work. Pre-planning of the details of the craft processes will enable the teacher to organize the craft with a purpose to enable the children to study the 'why' and 'wherefore' of craft processes, and to offer a basis for associated learning. The teacher should plan ahead the different processes of activities in order to maintain a progressive sequence of activities as well as a progressive sequence of associated and concomitant learning. After a recess of ten minutes, eighty minutes—from 10-10 A.M. to 11-30 A.M.—are given to associated learning and concomitant learning. During this period, the teacher should impart integrated knowledge (not loosely connected bits of informaton) arising out of the different craft processes or of other activities, undertaken in the preceding period. There should be integral relation between the experience received by the child in the preceding period and the knowledge imparted in this period. The knowledge, in the form of facts belonging to different branches of syllabus, should be imparted as an integral whole, arising out of the experience and the life-situations of the child. The teacher, for greater ease in dealing with his work, may classify this integral knowledge into various branches of the syllabus, such as languages, arithmetic, social studies, science etc. in its weekly detailed planning and in his record of work done. The point of emphasis is the integrated process of presenting knowledge, based on the practical data of work done by children. The success of the teacher depends upon creating an atmosphere wherein children feel the need for integrated learning. Even the processes of associated and concomitant learning should possess methodical and psychological bearing. Not only should the craft processes etc. be made the basis of correlated knowledge, imparted during this period, but also the daily routine activities, as well as the prevalent social

and physical environmental occasions, should be made the basis of correlated knowledge. This type of knowledge which is integrally related with the previous experience of children and which is presented, not in bits and pieces but as an integrated whole, will be received by the children with purpose and interest and will result in creative power of children. This gives purpose to imparting correlated knowledge in a basic school. In short, knowledge should arise out of the needs of daily living, and life itself should be utilized for solving the problems of life. Even the details of knowledge to be imparted should be planned on a weekly basis, and the results should be recorded after each day's work. This type of pre-planning brings gradation and organization into the knowledge given to children. In selecting the types of work and amount of work to be given to pupils, the teacher should give thought to the calibre and needs of children and to the natural occurrences and events which may take place, affecting the life and learning of children. While teaching, the teacher should teach all those subjects integrated with the experience of children. He should not rest content with teaching just one subject at a time. It means that all topics naturally arising out of the previous experience should be systematically brought forward and taught. Thus, this period of eighty minutes becomes the basis of associated or attendant learning of children. In the beginning, the correlated contents of knowledge will be of a factual nature, gradually becoming causal and intensive as children grow in age and understanding. After this, the school breaks for a long recess of about three hours, meant for meals, rest and homework.

Again, the whole school assembles at 2-30 P.M., and commences the afternoon session with community spinning, as the morning session starts with community prayers. A serene, purposeful atmosphere should be maintained by the whole school during community spinning if it is to achieve its object. After 3-30 P.M. eighty minutes are reserved for drill, revisional review work and/or expressional work of children. This type of work will vary according to the different needs of the pupils, but the teacher

should definitely plan the details of work for each day in order to achieve the purpose of education. He will foresee the needs of this type of training in his weekly planning, and should make provision for them, and decide the contents of work. The point of emphasis is that the teacher should plan and classify ahead, the contents of work to be done in this period—which is primarily meant for organizing the contents of incidental learning of children, received through experience and life-situations. If necessary, he may organize this type of class work on a group basis according to the different needs of various groups of children. He should have a thorough knowledge of the individual requirements of children and should organize the details of work accordingly, e.g., he may assign reading and writing or language study to one group, revisional work of arithmetic problems, or revisional work of social studies etc. to another group, or drill or review work in craft processes to those children lagging behind. The point is to assign the details of work according to the needs of various groups. Or, he may set the same type of drill or revisional work for the whole class. The purpose is to allot time for each child in which to make his learning systematic and effective. In short, the period of eighty minutes should be spent in making children practise and assimilate the essentials of earning, which they have received earlier, in an incidental and correlated manner. The result of this work will be the development of their different abilities. Provision for this type of work has been deliberately made in the time-table because such type of work —the formal treatment of topics—was neglected by teachers owing to certain misconceptions, discussed in chapter VI, and the learning of pupils remained scanty, unrelated and ineffective, and failed to develop the various abilities of children studying in basic schools. Thus, this type of work is essential to meet the needs arising out of incidental learning. It sould be well planned, organized and recorded by the teacher.

In the time-table, there should also be provision for a type of work which encourages self-study or self-expression of children. It may be creative work in the form of

drawing, or art, or may be in the form of co-lateral and referential study pertaining to the different elements of knowledge received. It will vary according to the different needs and interests of children. The work should be directed and guided by the teacher, but self-efforts of children should be emphasized. After this period, the class breaks for physical education—games, sports, drill etc.

The outline of the time-table given above is purely a suggestion. Teachers are at liberty to decide the details of work on the strength of day-to-day experience. This outline stresses the following points:

(a) To give scope to regular practice of daily routine activities to enable the children to form habits and attitudes to achieve the objectives of the scheme.

(b) To give scope to organize and grade experiences of children along with their crafts, life-situations and environments, and to enable them to feel, to think and to execute their experiences of life with purpose and interest, and to record the results as a process of education.

(c) To give scope for integrated knowledge arising out of different experiences of life and, to develop a social and scientific attitude towards experiences to reconstruct them.

(d) To give scope for productive and constructive human labour done on a community basis—community spinning—to achieve the purpose of self-sufficiency and service to others, on a social basis.

(e) To give scope for drill and review work with a view to organize and practise elements of correlated, but incidental, learning received earlier. Drill and review work will differ from that of orthodox schools. The purpose, the process and the product of the work will not be decided by the factor of the 'examination', but by the process of living. The contents, selected for this work will be life-centred, and the ability developed through this type of work will be utilized in the betterment of living and in service of others.

(f) To give scope to develop an attitude for self-study, self-expression and creative work in children.

(g) To give scope for physical education and recreative activities in forms of games, sports, etc.

Thus, the plan of work of the school, organized according to this time-table, will satisfy different needs and interests of children for their integrated learning. The sequence of time and the contents of work of the school will naturally vary according to the different seasons.

The Significance of the Flexibility of the Time-table

The outline given above is indicative. In the framework of the time-table, the child at work is kept at the centre, aiming at his all-round and harmonious development. The social atmosphere in educational practice should be stressed. The sequence of contents of work and the amount of time allotted for each type of work should not be followed mechanically. It should be modified intelligently according to varying demands and needs. Illustrations will make the point clear.

In the beginning of the monsoon season and at the harvest season, much of the time will be covered by working in the kitchen garden and doing agricultural work. The month of August or Shravan generally heralds many social and national festivals, which may be organized as class or school activities. To adjust to these needs, the normal routine of the time-table will have to be modified, as celebrations of festivals and discussions regarding them will, naturally, take up a certain amount of time. In October, again, while observing Gandhi-Jayanti week, the time-table will have to be modified for the whole school. Each class, as an integral unit of the school, participates in carrying out the project of the *vastra svavalambana* (self-sufficiency in cloth). Children will be busy with the different processes of the craft-work, and in learning the essentials of the project in form of related subjects. January offers rich potentialities in social and physical environmental occurrences and occasions of national importance. Yet again, to execute the programme of units of work, the routine

of the time-table will have to be modified. This necessitates detailed weekly planning, which then becomes the temporary weekly time-table of the class. Modifications of the time-table should be purposeful and intelligent, and undertaken in co-operation with all the teachers of the school. The same applies to the outline of the time-table for the residential school, which offers ample scope for intensive and integrated learning of children. If the time-table be practised intelligently, it trains children to value time and to finish the allotted work purposefully and successfully and within the time set for it. It also regulates life.

The Keeping of Records

In the orthodox system of education, records were kept, but they were of more value in administration than in imparting education. In this scheme, 'learning through living and for living' becomes the basis of day-to-day practice. It calls for a change in keeping records—the implication of which should be clearly grasped by teachers. In the absence of this, the teacher will keep record mechanically, inaccurately, and will carry out the task as a drudgery. Such records help neither the development of the teacher nor of the child, nor do they facilitate the work of administrators. A common cry is heard among teachers of basic schools that they are over-burdened with the job of keeping records. This indicates their attitude towards the work. In the traditional system, education was interpreted to be a process of schooling, wherein the teacher had to impart only verbal information of the three R's and to get back the knowledge presented when the traditional type of examinations came round. In actual practice, the teacher had mainly to speak, to read and write for his job of class teaching. He had not to bother about the work of recording as an integral part of his job of teaching which was considered a part of the functioning of the clerical department. Thus, their interpretation of school work was incorrect. Without realizing the significance of this new, but essential, type of work, the teacher took it to be 'extra work' and not a part of the whole. For the realization of the social aims of the scheme, the very process

of living, along with life-situations, has been made the basis of education, and, as such, the practice (and not the talk) of well planned and organized activities has become the core of the curriculum and of day-to-day practice. From this point of view, the teacher has to deal with actual life-situations and activities arising out of the life of children. He has to plan and organize the practice of activities and to record the result as a process of educational practice in order to realize the objectives of the scheme. Under no circumstances should they be carried out at random. Thus, the work of recording is most important. It has manifold purposes. It becomes the basis of the future curriculum, the day-to-day practice of the technique of correlation, the basis of framing the time-table and the means of assessing the work of children.

A teacher of a basic school has to keep records of various types. They can be broadly classified as:

(a) records to be kept by the teacher, and

(b) records to be kept by the pupils.

(A) Records regarding Periodical Planning of Work of the Teacher

Periodical Planning of Work

The teacher should prepare an annual planning of work indicating gradation of learning of pupil. It should be sub-divided into monthly planning of work, which again should be sub-divided into weekly planning, with details. The weekly planning should be thorough, detailed and graded. It should be in the form of a weekly time-table giving details of work-units to be carried out in different periods of different days of the week. It may be kept as follows:

Form of a Weekly Planning

Date	Details of daily routine activities	Contents of correlated learning	Time to be spent for each item	Craft or activity and/or environmental occasions
1	2	3	4	5

Time	Topics to be correlated	Time	Formal treatment of topics	Time
6	7	8	9	10

Craft Work			Remarks of the teacher
Processes to be carried out	Output of the class along with total number of pupils	Time Spent	
11	12	13	14

After the day's work, the teacher should record his experiences in detail in the column No. 14—'Remarks'. He should record those contents which are not done, or more of the contents executed than was planned. He should also note any type of modifications, alterations and additions with reasons for them. He should mention in this column, his special experiences if any, regarding the behaviour and progress of children, etc. If this column of remarks is kept scientifically, it will serve the purpose of having a weekly record of the work done. Each column should indicate the contents of learning along with the time spent. Thus, a weekly planning-cum-weekly record of work done will give practical and scientific data for improving upon a detailed syllabus of correlated studies, and will give a basis for a detailed time-table of a basic school, and will indicate the progress of work.

Weekly Record—the Basis of Group Discussion

All teachers, belonging to different grades of the basic school, should jointly discuss and decide upon an outline of periodical planning of work. This joint planning is essential to maintain gradation and inter-relation of details of work to be done in different grades. Without this joint planning, there will be no gradation or inter-relation of work. Consequently, there will be overlapping of work-units and omission of subjects. This will harm the correlated learning of children, as discussed in chapter VI. There should be not only joint planning but also regular joint discussion on the records of work done in various grades of the school. The joint discussion of teachers

regarding the work done, will improve the future weekly planning and this in turn will affect the daily teaching and will solve many problems of day-to-day practice based on the technique of correlation.

Periodical plannings will enable the teacher to make the process of correlation natural, effective and efficient. Particularly, thorough and detailed weekly planning-cum-recording will solve many of the day-to-day problems. This type of periodical recording kept in a scientific manner will enable educational thinkers and workers to improve upon the quality and quantity of the structural as well as the functional aspects of the scheme.

B. Records indicating Progress and Accounts

Periodical records help the teacher in organizing the contents of educational work, which keeps the child at the centre along with his harmonious development in the social atmosphere of the school. As such, the teacher should also keep detailed records which account for the following:

(a) the life-situations of the educand at school and out of school;

(b) quality and quantity of educational work done by the educand;

(c) nature of progress achieved by the educand.

Life-situations of the Educand

This scheme takes the whole life (and not some aspects of life) of the educand as a basis of education, so the teacher should maintain an individual record for each child indicating the following items:

(1) At the time of admission to the school, details of the history and circumstances of the family should be entered in a special register. This will help the teacher to understand and interpret the quality of domestic life of the child which affects, in turn, the quality of living of the child at school.

(2) The teacher should keep a detailed record in diary form of his observation of each child at school. He should record details which account for the following:

(a) Details regarding weight, height, personal and environmental cleanliness and health of the educand;

(b) Details regarding his regularity of attendance, interest, attitude and achievement in different types of work of the school, e.g., records of his craft work, literary work, self-study, social work and self-expressive work;

(c) Details regarding any special feature of the child's development should be noted by the teacher as occasion arises.

This type of comprehensive record of the child's development brings the educator and the educand into closer and purposeful contact, helps the educator to understand the living process of the educand and guides him to improve his quality of living. These records become the basis of guidance and assessment of the progress of the educand at school. Just as records regarding periodical plannings of work are useful for the structural and functional aspects of the scheme, so also this type of record, gives an account of the progress of the educand and success of the scheme in practice. Besides this type of record of individual progress, the teacher should also maintain records of craft work, community activities of the class as a whole and as a part of the school, other literary activities and expressive activities, as they will help workers to assess the progress of the scheme from the educational, economical and sociological aspects. Thus, records are essential for organizing and practising the different aspects of the scheme, and for evaluating the results. Hence, they should be treated, not as extra work but as an essential and integrated process of education of a basic school. From this point of view, bearing the principles of basic education always in mind, teachers should be encouraged, trained and helped to keep faithful and systematic records, regarding the planning of work, progress and records of work done. In this scheme, children of basic schools should be trained to keep records of work done.

Records of Children

In basic schools, children are to be trained to plan and organize their work and to record and assess their results. For this, they have to maintain records which account for their craft work, community work, literary work, self-study, collateral study and self-expressive work. According to the calibre and requirements of children, the nature and type of these records will vary, but they will nevertheless help children to know their own progress and will aid teachers in assessing the development of children. The records kept by children should be taken into account while assessing their progress. This is important, because the technique of the practice of the scheme demands that children should be trained, not only in doing work, but also in planning and organizing the work assigned, and to record and assess the results of the work done. Thus, records of the educator and of the educand become the basis of evolving a syllabus of correlated studies, a basis of evolving the art and science of the technique of correlated practice, and a basis of assessing the development of the educand. Records should be treated by teachers not as drudgery or extra work but as the basis and means of the work of schooling.

Need of Change in Outlook for Assessment Work

In any system of education, some organizational device is to be evolved to assess the progress of the educand in particular, and to judge the results of schooling in general. In this scheme of education, where the objectives, contents of the curriculum, and the technique of practice are of a peculiar nature, naturally the type of assessment work will also differ.

In this scheme, it is not merely learning to live, but it is purposeful living to learn. Learning of a formal academic type is not prescribed, but planned and organized purposeful living of the educand, based on productive and constructive manual labour, carried out in a social atmosphere, is prescribed as the centre and medium of

education. As such, the nature and type of assessment work will vary.

Here, educational practice starts with the very living of the educand, and aims to enrich the quality of day-to-day living, and in enabling him to create a new social order. Thus, correlation exists in process of living, work and learning, it is integral. Hence, to evaluate a scheme of assessment, work should be so devised and organized as to take into account the skills, habits, attitudes, knowledge and different types of capacities acquired by the educand, through purposeful and organized day-to-day living in the school. His day-to-day progress should be recorded and be utilized as a means of assessment work.

Thus, the nature and type of assessment work should take into account the daily progress of the educand, as well as provide full scope to him to express his abilities and capacities with a purpose to judge the quality and quantity of his attainments. From this point of view, periodical records, kept by the educator and the educand, objective impressions of the educator about the work of the educand, and the work to be done by the educand at the end of the year, should become the basis of assessment. In short, with regard to assessment, the evaluation of three P's i.e. the Product, the Process and the Producer should be made.

From this, it is quite clear that the orthodox system of examination and marking are quite unsuitable for the purpose of evaluating the work of children in basic schools.

At the end of the year, assessment should be made by a committee. The committee should consist of persons who are thoroughly acquainted with the syllabus of the basic school, with the technique of correlation used in day-to-day practice, and with the requirements of the assessment work of children in basic schools. The latter should be divided into two parts: (1) Practical work regarding craft, community life and social service, and (2) written tests. The committee should form an opinion about the practical work on the strength of diaries or records, kept by the children as well as by the teacher. Generally, the

headmaster or class teacher of the school, who happens to be the internal examiner, being a member of the committee, should give his detailed opinion about the year's work of children, and guide the other members of the committee. The assessment of the year's work has now become an integral part of the examination of children in basic schools.

Practical Test in Craft, Community and Social Work

The committee should give a practical test to the candidates appearing for the examination. The practical aspects of training of candidates is thus assessed by the internal as well as by the external members of the committee. The year's work, as well as the practical work, at the time of examination is thus taken into consideration to assess the progress of candidates.

The Written Test

For the written test, question papers should be set to candidates. The committee should draw up question papers, conduct the examination at selected centres, assess the answer scripts of candidates, and prepare and declare the result.

Even for the written test, care should be taken regarding the drawing up of the question papers. They should be drafted in such a way as would test the practical work of candidates. Those candidates who have gone through the practical work should be able to answer them. Their written test, though of a literary type, should not be purely of a bookish and academic nature as is the case with the orthodox type of written examinations. Practical tests should assess skills, habits, attitudes of children, and their efficiency in individual and group work, and the written tests should assess their literary correlated training and power of expression in writing. It is the approach that matters and not the mere possession of elements of knowledge.

Thus, it will be clear that the peculiarity of objectives, activity curriculum and the technique of correlation

of the practice fundamentally affect the nature and type of examinations set to children in basic schools. Though the details of assessment work may be modified on the practical data of experience by members of the committee, yet the approach should be in accordance with the spirit of the scheme.

Effects of Assessment Work in day-to-day Practice

The nature and type of assessment work will affect the attitude of teachers to drill and review work and also for maintaining thorough and systematic records of work, since they influence the quality and quantity of work done in all the grades. At the annual assessment of all the grades, cognizance should be taken of the following:

(a) Regular attendance.

(b) Attitude to work.

(c) Development of a scientific attitude.

(d) Ability for doing and getting work and power of expression.

Thus, it will be clear from the above discussion that the successful and effective use of the technique of correlation in basic education requires corresponding changes in curriculum-construction and its interpretation in day-to-day practice: change of outlook regarding the time-table, and the importance of records and their significance as a means of evolving a future syllabus, a time-table and a basis of assessment work. This is essential because the technique of correlation in basic education deals with the actual living and doing of the educand, and a purposeful modification of the quality of his day-to-day living for the realization of the aims of basic education is therefore necessary. From this point of view, the practical aspects, dealing with the use of the technique of correlation are discussed in detail to enable teachers to understand it correctly and to practise it efficiently.

CHAPTER IX

PSYCHOLOGICAL AND EDUCATIONAL BASIS OF THE TECHNIQUE OF CORRELATION

Basic education aims at developing a type of individual who would look upon himself as an integral part of society, developing in him a sense of unity and comradeship with others. Secondly, he shall fulfil the obligations of creative and constructive citizenship and contribute to the enrichment of society without sacrificing his distinctive individuality. This type of individual will appreciate all that is worthy in ancient culture and tradition, and strive to develop a common culture for the nation. He will realize the value of manual labour and will spend all his energies and talents in the cause of social service without allowing himself to be a drag on society. In short, basic education aims at the development of the whole personality of the child, *through work*, which enables him to lead a corporate and abundant life in shaping the destiny of his country, in harmony with the ideals and progress of the world in general. To suit the ideals of basic education, on an equally original and enlightened basis, the teaching technique, known as "education through productive and constructive activity" has been evolved. The technique of the method of correlating educational practice with productive and constructive activity has a psychological bearing.

The Psychological Bearing of the Technique of the Method

This activity-centred educational practice is capable of imparting knowledge, skills, efficiency etc. on a psychological basis, and develops the child's intellectual and other powers in an integrated manner. Those acquainted with the orthodox method object to this new method and say that it does not help the organized development of the child's mind, as disconnected bits of knowledge are given in an illogical manner. They say that knowledge is not presented, on a logical basis and hence the child's mind is

not developed properly. They fail to understand the working of the minds of children studying in primary grades. Knowledge is imparted as a by-product of actual experience of the educand and is presented on a psychological basis. The objection is not justifiable on the following grounds:

As the child's experience about the materials, means and environments, used for real, genuine, productive and constructive activity in actual life grows richer, the child is impelled to reason out the 'why' and 'wherefore' of things, and of processes and situations in school and outside, with the result that his mind becomes richer and clearer. He is led along his own line of curiosity, and intellectual interest and bits of knowledge acquired fall into line. "It is based on the fact that child's mind is an integral whole, welcoming experiences as unity, not as a collection of separate unconnected fragments." This is not so in the case of a child who has learnt in the traditional method where his mind is filled with certain logically arranged bits of knowledge whose significance he has been unable to comprehend. In the orthodox method the approach was logical, but formal, and failed to enrich the functional aspect of knowledge. Depicting its fallacy, Ross, one of the prominent educationists of the world, has made the following observation:

One can condemn such processes of cramming and yet concede a point to the middle-aged diehards who themselves underwent an unintelligent training in information, and who complain that their children seem to be very badly informed nowadays on matters of everyday knowledge. For the information fallacy is a perversion of what is, after all, a sound view, namely that knowledge should be nurtured. Mere erudition is worthless; but true knowledge is something more than masses of facts. Facts must be capable of functioning; true knowledge is potentiality, a power to do. Knowledge must include practice; the possessor of facts must realize that his facts are relevant to certain situations and be ready to apply them, knowing 'how', as well as knowing 'what' and 'why'. We go wrong if we think of ideas as the furniture of the mind; it is much sounder to think of them as the mind itself. Pursuing the nurture analogy, we may

say that, just as food does not remain something in the body but becomes the body, so do properly assimilated facts become the mind. A mind that is merely crammed with facts is suffering from mental indigestion; tags of information no more enable the mind to function than does undigested food enable the body to function. We must, then, think of ideas as active entities, as the mind's powers to deal with situations: as Herbert Spencer said, "Knowledge is turned into faculty as soon as it is taken in, and forthwith aids in the general function of thinking," or, as Adams used to paraphrase this dictum, "Fact becomes faculty". Herbert's doctrine of apperception-masses contains the same view of knowledge in another guise.

This, the true nurture view, is eminently sensible. To sum it up, we may repeat that the mind must be fed and enabled to grow in such a way that it will be fit to cope with the problems it encounters. Mere information does not produce this result. Not all knowledge is capable of functioning in action and thought; not all facts become faculty. But true knowledge that is the organon of education must result in power to understand the world, to be on top of situations that present themselves, or to have a prospect of being so. And the world referred to is not merely the physical world of everyday life; it includes social relationships and cultural activities. True knowledge is the material out of which a resourceful mind is made. Thus, the nurture view of knowledge can be broadened sufficiently to satisfy the most ambitious of educators.[1]

In this observation, Ross justifies the psychological approach of the technique of imparting correlated knowledge in context with life-situations of children and indicates the futility of the orthodox method of imparting formal, academic instructions based on the method of teaching through a passive listening of ideas. It was believed that ideas, thus received, would transform themselves mysteriously into volitional acts.

Necessity of Perceptual Experience

Children are very keen on getting an opportunity to explore, to investigate and to make things. This satisfies their curiosity. They also like to express themselves through materials, and working with materials offers

[1] Ross: *Groundwork of Educational Theory*, pp. 180-82

them rich perceptual experience. This is an essential aspect of education for children. In the technique of correlation, the sense organs of the child come in contact with various types of materials and impel him to creative and constructive activity. The child deals with these materials in a purposeful manner to improve community life. But, it also gives him joy. He develops his faculties and becomes a unified and integrated personality. Perceptual experience is essential, as a basis, to educate a child for the harmonious development of his personality. This has been stressed by modern educationists. G. G. Schoenchen, justifying the need for perceptual experience for the impressive and expressive aspects of education of the child, has observed as follows:

Through the sense organs we get sensations, the awareness of these sensations is perception, the perceptions are mentally digested by comparison with the apperceptive mass, the result of such digestion or assimilation being a concept. Now the richness and accuracy of a concept depends upon richness and accuracy of the percepts. Hence arises importance of having many and varied percepts to enter into the formation of a concept. These percepts, to be rich, varies and pedagogically adequate, must come from different senses, and must be of different quality. Furthermore, they should be repeated in point of time and made under varying conditions. A pedagogically satisfactory object lesson, therefore, employs as many senses as possible in as many situations as possible. Concept forming, being the conversion of the outer phenomenal world into the inner noumenal world, is half the process of education, the half we call the acquisition of knowledge.

The reverse process, expression, the impingement of the inner world upon the outer, is co-ordinate in importance with the former process of impression. Chief of the means of expression is speech; but speech is not the only means. The activities of body — drawing, modelling, any kind of manipulation of matter—are rich means of expression which the traditional 'learning' school for the most part neglects. Such expression takes place in response to innate drive, and the satisfaction of this drive is a need of child life. The suppression of expression is, therefore, psychically injurious. Expression takes place first in mere reflex actions, but these soon are replaced by conscious

or directed action. They, therefore, involve the will and the judgement, for the child must consider the steps to be taken in order to express his inner life in the outer world, and, through an effort or act of the will, take these steps. Hence the manifestations of expression are not merely mechanical, that is, physical activity, but also mental, that is, psychophysical activity.[2]

Thus, Schoenchen stresses the necessity for a sound psychological background for correct and clear concept-formation, and advocates a natural and free manifestation of self-expression for educational purposes. In the scheme of basic education, we see that this is specially important. It is through purposeful, creative and constructive work that a child receives his 'impressions' and manifests his 'expressions' as a process of education. It is through various types of organized work of the school that a child receives rich perceptual experiences which, in turn, give clear and correct concepts. On the solid basis of 'impressions' he plans and executes his work with purpose and tries to accomplish the desired results. In the process and product of the work, he expresses his inner nature. His 'expression' manifested through work, is based on a solid background of 'impression'. Thus work becomes the medium of his 'impressions' as well as of his 'expressions'.

Integral Development of Different Abilities—a Basis of Harmonious Development

In a basic school, the child is required to perform various types of activities like daily routine activities, craft, community projects, and take part in artistic and cultural pursuits, or incidental activities arising out of the life situations and environmental occurrences as a process of educational practice. Through practice of these activities, he acquires skills, attitude and habit formation, and knowledge necessary for the development of his personality in order to reconstruct the social order. The technique of doing provides for the manifestation of his neuro-muscular, sensory and motor power. Through constant and well-organized practice, these powers are co-ordinated and

[2] G. G. Schoenchen: *The Activity School*, pp. 34, 35

developed harmoniously and the child attains integral development of his personality. In the orthodox system of teaching, this type of co-ordinated and harmonious manifestation of powers was not achieved and, consequently, the child merely received a formal education at the cost of other aspects.

The child's planning of work, according to needs, and its execution develop in him the cognative and practical insight. He acquires skills, habit formation and knowledge. After achieving efficiency, he tries to make his product more artistic and useful. Thus, he develops aesthetic taste and tries to manifest it in the very process and product of his work. Later, altruism sets in. This spirit impels him to dedicate the products of his effort for the good of others. Thus, through purposeful work of a productive and constructive type, the child acquires a cognative, practical and aesthetic insight and develops a spirit of altruism. An illustration will make the point clear.

A child, in a basic school, begins to learn spinning and weaving along with their allied processes. He comes in contact with the necessary materials, things and processes of various types, and, using his different senses, forms rich and clear concepts about them. With this insight he begins to work with the materials to accomplish the desired results. For this, gradually, he will perform different processes from cotton picking to cloth-making. This will yield co-ordination of his neuro-muscular, sensory and motor power, and will result in harmonious development of his total personality. By practice, he will acquire skills and mastery over different processes of the Project of 'From Cotton to Cloth'. After gaining efficiency of practical nature, his aesthetic taste will inspire him to make his products more artistic and useful. He will produce yarn, possessing a higher count, strength and evenness, and will try to produce cloth of a pleasing and durable kind out of the yarn spun by him. The product—cloth—will give him joy in creating and making. He will value the product of his work—artistic cloth—not in terms of money, but in terms of his 'impressions' and 'expressions', interwoven in the texture of that cloth. He will realize 'himself' through

the materials used and the process done by him for achieving the product. He will be one with the product. He will utilize that product with joy, care and dignity. It will create in him a reverential attitude for the materials and tools which were useful for doing that piece of work. He will try to appreciate work and workman through his own accomplished work. In the school, to accomplish the project of 'From Cotton to Cloth' the child will use different materials and tools and will execute many processes, not mechanically, but scientifically and on a community basis, and therein lies his education.

The son of a spinner or weaver also gets cognative, practical and aesthetic insight while learning the different processes with regard to that type of work, and learns about materials, tools and processes, but his learning is mechanical, carried out on an individual basis, and is to accomplish commercial value. So the nature of his learning, insight and joy of creation will be different from those of a child who has achieved all this as a process of education. It is the atmosphere of the school, wherein the materials placed at his disposal, offer him cognative insight; constant practice in their use offers him practical insight and a knowledge of aesthetics; the scientific spirit of work gives scope for improvement, and the social atmosphere of the school imbues him with the spirit of altruism. The child, as an integral member of the community, will gradually develop a spirit of altruism and will get the same joy out of sacrifice as of creation, while dedicating the finished product—artistic cloth—to the service of others. This is accomplished, not through words, but through work of a practical nature.

It should not be thought from the above illustration that a child in a basic school will achieve all this, in a day or a year and that too only through this one project only; it may take his entire period of schooling but the point of emphasis is clear —it is the medium of purposeful, creative and constructive work done systematically, scientifically and on a community basis that yields a solid basis for developing cognative, practical insight, aesthetic taste and a spirit of altruism in the educand.

The Development of Intelligence through the Technique of Correlation

In this type of educational practice, the child is required to plan and accomplish various types of work on a social basis to achieve the desired result. For this, he has to deal with concrete things and has to construct and create things out of raw materials. Moreover, he has to work in a community atmosphere and has to carry out social dealings for purposeful creation. The process is to be carried out not only socially but also scientifically. The whole technique of practice is aimed at developing the child's mechanical, social and abstract intelligence.

A distinguished American psychologist—Thorndike of Columbia—has maintained that three distinct types of intelligence must be recognized. These he calls respectively, "mechanical", "social", and "abstract" intelligence. By "mechanical" intelligence he means the ability to learn to understand and manage things and mechanisms. By "social" intelligence he means the ability to act wisely in human relations, and by "abstract" the ability to understand and manage ideas and symbols. That these three types have something in common is indicated by the fact that we call them all types of intelligence.[3]

In this technique, children have to deal with concrete materials to construct definite articles fulfilling the basic needs of life and thus their mechanical or concrete intelligence is developed. It is poorly developed in people who are products of the orthodox bookish type of education. They were not introduced to concrete things of life but were introduced to symbols and words in their formative years of life through the process of education. As a result of their education they were used to words and symbols and found it difficult to deal with the concrete things of life. Moreover, in the process of their education, efforts were being made to develop critical intelligence, not through the genuine experiences of life and problems of life, but through words and symbols; and that too, without developing creative and constructive intelligence through work. This was done in the name of offering education which was

[3] Drever and Collins : *Performance Tests of Intelligence*, p. 11

meant for developing their intelligence. The purpose was genuine but the medium and process were faulty. Words and symbols were the media adopted for developing their critical intelligence. Consequently, they could not develop their creative and constructive intelligence, had no ability and inclination for work dealing with concrete things, despised manual work and tried to exploit the product of manual work of others for their wellbeing. They became argumentative and relished a life full of words. Critical intelligence can be developed through genuine work of a creative and constructive nature. In this technique of teaching, a child has to deal with concrete things for a definite purpose and this develops creative and constructive intelligence which in its turn develops his critical intelligence. The intelligence developed through creative and constructive work is also utilized for creative and constructive purposes of life.

Moreover, a child is required to design and accomplish work, not on an individual basis but on a community basis. As an integral member of a well-organized community, he has to plan, organize and execute his work on a community basis and for this, he has to work with others and for others either as a leader or as a follower. He has to deal with the comrades assigned to help him in completing his work. There is 'give and take' of work on a social basis. A child has to deal with concrete materials as well as with human beings to complete his work and gain education. This, in a basic school, is organized on a democratic basis. It offers a selected and synthesized process of living on a social basis through which it offers training to a child for the future betterment of the individual and the community as a whole. The well-organized and supervized practice of social dealings, carried out as a process of education, develops the child's ability to deal with people, or his 'social intelligence'. From the early years of life, when a child is at a formative stage, he learns to deal with people with understanding, co-operation and tolerance. This offers him rich opportunities to develop his social efficiency. It is particularly essential for the system of education which aims at developing democratic personalities. It trains a child

to be an efficient leader as well as a follower. He learns to act efficiently individually as well as in a group. If in the latter, he learns to take orders from others. Thus, he develops 'social intelligence', not through bookish verbal knowledge, but through actual social dealings carried out to achieve definite social purposes.

People who are the products of the orthodox system of education show poverty in 'social intelligence'. The reason is obvious, since well-organized and constant practice in social dealings was not considered an essential factor in their training. There was bookish and formal teaching and they had to resort to books to pass examinations, in an individual capacity. This encouraged the individualistic tendency. They found it difficult to work with others and for others, and to make others work. The individualistic tendency came in the way while dealing with others. But, in the technique of correlation the child has to deal with others constantly to complete his work. This develops his 'social intelligence'.

While working with concrete materials and people, the child learns to form ideas about the working of Nature and of human relationships. He tries to understand the 'why' and 'wherefore' of natural and social phenomena on the basis of his 'concrete and social intelligence' acquired through actual experiences of life. He forms his own ideas on the practical data of experience of life. This develops his ability to deal with ideas, or his 'abstract intelligence'. In the orthodox system of education, much has been said and done to develop 'abstract intelligence' without developing the 'concrete and social intelligence'. Consequently, it remained vague and inactive. People had to face all sorts of ideas and this confused their reasoning and puzzled them. This technique, through work, offers rich and practical opportunities for developing the concrete, social and abstract intelligence of the educand.

The Educational Bearing of the Technique of Correlation

As discussed above, the technique of correlation in basic education offers the principle of activity, in the form

of productive and constructive work, organized on a social basis. It, being the best medium in our educational procedure, expresses the "empirically discovered truth that the child grows by his own efforts and his own real experience, whether it be in skill or knowledge, in social feelings or spiritual awareness." It is not what we do to the child that educates him but what we enable the child to do for himself as a member of the community. The child learns to solve his day-to-day problems of life through manipulative solutions. Psychologically it is the most effective and efficient process of learning. This method of solving problems of social life through actual doing, makes him a good 'thing' thinker before he becomes fit to be an 'idea' thinker for which he has to exercise the other two forms of solutions namely, the imaginative solution and solution by language. The manipulative method is not only a source of pleasure, not merely a means of developing bodily skills, but also an effective means of understanding and thinking.

This technique keeps alive the young child's desire to learn and to understand life. It makes full use of his interests and emotions in the service of knowledge, skill, attitude formation, and social development and affords to the child the pleasure of making things. He feels self-confident at every stage of success like an actor. "I have acted once" is a better testimony than the remark, "I have read voluminously about the technique of acting". The child receives integrated learning because he feels its purpose which arises out of his life-situations, makes efforts to realize it, and experiences the effects of his learning in the very process of his living. To make his learning active, purposeful and effective, the teacher should create an atmosphere wherein the child will be inspired to learn the four important educative processes:

(a) Planning an activity before actually executing it;

(b) Considering the selection of the proper means and tools of executing the plan of work;

(c) The actual execution of the work with the tools selected and according to the plan kept in view, and

(d) Seeing that success of the final product corresponds to the original plan and that it has been executed with the means considered appropriate.

It is these processes that make him educated and not mere skill or knowledge attained in doing an activity. From this point of view, it is worthwhile to discuss the various stages of planning a correlated unit to understand their significance correctly and clearly.

Various Stages of Organizing an Educational Unit Centring in Work

The technique of correlation in basic education is a synthesized technique, composed of elements of progressive methods of teaching of modern education. It offers a dynamic and composite method of educational practice, which accepts the following:

(a) The activity-principle as the basis of education, though with a different criterion of selection;

(b) Socialized recitation plan for oganizing class work,

(c) Fundamentals of the stages of the project-method for the actual conduction of the educational unit, and

(d) Spirit of Play Way in providing the atmosphere for educational practice.

Every educational technique formulates its own system of procedure of work to realize its objectives. For example, Herbart evolved a system of procedure of educational practice, known as the Herbartian System, offered Herbartian steps to develop an educational unit in conformity with his doctrine of apperception-masses. In the same way, the technique of correlation in basic education has also evolved a system of developing an educational unit centring in work. It is comprised of the following stages:

(a) Planning: Purposing (motivation), preparation: Decision of place, raw materials, equipment, workers, time, organization and distribution of details of work.

(b) Execution: Demonstration work of the teacher, children's work along with supervision and guidance by the teacher.

(c) Recording and Assessment of Results: Recording of the work done, assessment of the result, correlation of subjects and formation of habits and attitude.

Implications of each of the above stages are discussed below in detail to enable a teacher to organize the practice of educational work in the day-to-day programme of the school with clear concepts and insight.

Purposing

The teacher should make clear to children the purpose of work to be done by them. The acceptance of the purpose by children as their own will inspire them to work with interest, enthusiasm, and sustained effort. It should be made clear by the teacher according to the needs and calibre of children belonging to different grades of the school. He should create an atmosphere wherein they should feel that work, to be organized and carried out, is their own and not thrust upon them as a drudgery. Such type of purposing will enable them to do the work in a play-spirit. Mere narration of the purpose by the teacher will not create the necessary atmosphere. This process of purposing is something more than a "statement of aim" of the Herbartian steps. As a matter of fact, purposing cannot be given by mere telling. It must pervade the atmosphere of the school so that children become incentive-conscious. The teacher's task is to create such an atmosphere.

Preparation

After clarifying the motivation of work, the teacher should help children to plan their work. For this, they should be required to decide the following: Place of work, time to be taken to finish the work, raw materials, and equipment and human power to be utilized to achieve the result, as well as organization and the distribution of details of work.

(i) The Place of Work

The teacher should carefully select the place of work and discuss why the environment and conditions are suitable for the work which is to be done. Children should be

made to understand the bearing of the place on the work to be executed. For example, organizing a trip to an unknown place will be quite different to organizing a function in their own community. Or, organizing village *safai* work will be different to their own routine *safai* in class or school. The place affects the nature of organization of work and this should be clearly explained to children by the teacher.

(ii) Discussion about the Raw Materials, Equipment and Human Power Necessary for Work

The teacher should enable children to decide about the tools and materials necessary for the execution of work. He should write the names of the things to be used on the black-board, if necessary, and should give instruction regarding the method of their use, and the care which should be taken of them. They should be encouraged to find, collect and select appropriate materials and information necessary for the successful execution of the work undertaken. This develops a spirit of inquiry, and a courteous approach to others to obtain the necessary items or information. Thus, they will be introduced to concrete materials with a definite purpose in view. Children learn to deal with materials, and estimate them in terms of utility of the work to be completed. Constant and purposeful contact with concrete things develops cognitive insight and 'material intelligence'. Moreover, they should be trained to estimate the amount of human power required to complete the allotted work.

(iii) Discussion of the Time Factor

The teacher should enable the children to estimate the amount of time that will be required by them to complete their work. This will train them to complete the work punctually and successfully. In the beginning, children will either over-estimate or under-estimate the time factor. The teacher should allow them freedom to estimate the time and should encourage them to compare the amount of time actually spent for their work with their estimated amount time. By such organized practice, they will learn to

estimate the time factor accurately from their own experience. To complete the work successfully and in time is an art. They will realize by practice, that the amount of time required for the work to be done depends upon the following: (1) Amount of work to be done, (2) nature and type of human power, (3) materials available and (4) the surroundings in which the work is to be executed. Thus, children will be trained to estimate correctly the material force, human power and time factor necessary for successful and expeditious work.

(iv) Organization and Distribution of Work

This includes the following two aspects: (1) Discussion of details of work and their distribution; (2) sub-units of work and their sequence.

These two aspects will depend upon the nature of work. There will be some activities like spinning, weeding etc. which will have a simple and single process. Others, like preparing a bamboo sliver-rod, carding-bow, a cardboard tray, or preparing a compost-pit will comprise multiple and complicated processes which will contain both the aspects, mentioned above, and therefore careful planning is essential for successfully and efficiently carrying out the project of work.

Discussion of Details of Work and Their Distribution

The teacher should make clear the outline of the details of work to be done by the children. This should enable each child in the class to know definitely what particular piece of work he is to do and the method of doing it. If necessary, the teacher should write instructions on a black-board giving details of work to be done and the methods of doing them. There will be certain types of activities wherein all details will have to be executed by each child of the class. For example, children entrusted with the job of cotton cleaning to spinning will be required to do all the processes concerning it, such as cotton cleaning, ginning, carding, slivering and spinning. To ensure training, the teacher should emphasize the quality of each process. For this, he should give the necessary instructions

to be observed by them. Here, each child is required to do more than one process. There are other activities, the different processes of which will have to be distributed groupwise —in the form of a project. Here, it will be necessary to discuss and distribute the details of work, e.g. (a) an activity like preparing a plot for a kitchen garden will require group effort and co-operation. One group will select the plot and measure it, and other will dig it, and yet others will clean and level it, sow seeds and water it; (b) an activity like preparing a carding-bow will require division of labour, like cutting a bamboo into sticks of measured length, smoothing them, making strings and tying them and preparing the finished products. In such activities the efficiency of a teacher is tested in organizing the group work. He should discuss and distribute the details of work in such a way that each child gets a definite piece of work to do and thus contributes to the community wellbeing. Each child should feel responsible for completing his work to the best of his ability. The teacher should be considerate and judicious in organizing and distributing the details of work, giving none an opportunity to be idle or indifferent towards work. He should also see that no one is overstrained or overburdened. It is obvious that in group work he cannot engage all children of the whole class for all processes of the work for all the time, but this gives him an educational opportunity to train children, to discipline their behaviour and to learn, wait and watch patiently for their turn and to observe the processes, done by others, with interest and care. He should distribute the details of work to children or groups of children according to their capacities and abilities. Indiscriminate distribution of details of work harms the worker, mars the purpose, spoils the finished product and even adversely affects group life. He should also train children to be discriminate when they have to distribute details of work as leaders of groups. Joint execution of work should develop in children the co-operative habit, and should give elementary training in leadership as well as in following the order of the leader with sincerity and understanding. This will give them practical training in social dealings and

develop social intelligence. All this is very important. The class discipline, group behaviour of pupils etc. will mainly depend upon the clarity of the understanding of the details of work assigned to them. The tone of class behaviour which will be manifested at the execution stage will depend upon the nature of distribution and organization of work done at this stage.

Sub-units of Work and Their Order of Occurrence

The activities mentioned above possess multiple and complicated processes. The teacher should discuss and explain the pros and cons of each sub-unit of work. There are some activities whose every process, in its order of sequence, requires care. Indifference, or a mistake in one process, or a break in sequence affects the finished products and harms the worker, e.g. (a) in making a cardboard tray, a mistake in a process will adversely affect the finished product; (b) a wrong placing of the *mal* at the spindle while twisting the yarn will spoil the product.

Useful Hints For the Planning Stage

(1) The teacher should not take more than the essential minimum of time in discussing the different details of work as children become impatient. His discussion should give them a general but definite outline of work to be followed by them, along with its procedure and the method of doing it. This should enable them to understand clearly the place, time, materials and organization of the designed work. He should not waste time and energy in giving them detailed and minute suggestions as they are psychologically and educationally unsound.

(2) The teacher should clearly understand that there cannot be stereotyped and mechanical planning for all the activities and for all the grades of the school. Such mechanical planning will harm the purpose of education. Needs of children and types of activities will decide the nature of the planning. The different items of the planning stage, discussed above, should not be taken too literally. In some cases, discussion and distribution of details of work may precede and decide the discussion regarding materials,

time etc. The planning should be purposeful, natural and educative.

(3) The planning should stimulate the spirit of play-way of children and should enable them to estimate the materials, human power and time-factor correctly. It should give a clear concept of the nature of the finished product to be accomplished by children as à process of educational practice. As such, it is worthwhile to show them a model of the finished product which they are required to accomplish. This will give inspiration and directive to their efforts. It is particularly essential for little children and for new types of activities where children have to learn new technical skills regarding new processes. For example, a model of a sliver of a standard weight, or a hank of high count, evenness and strength will inspire them to make their finished products according to the standard of the model presented before them. Critical observation and close study of the model will help children to make efforts along the right lines.

Significance of the Planning Stage

Planning the activity will give children the necessary training in organization. Children educated by this technique will develop a habit of planning their work and their life. It trains them to get the maximum results, with the minimum expense of time, energy and materials, and the process of work will be carried out quietly and efficiently. People, not possessing the planning habit, commences work in an unplanned manner, on the spur of the moment, spend much of their time and energy as well as those of others and attain poor result with a certain degree of strain. Haste and strain spoil their temper as well as that of others, which affects social intercourse. Unplanned work harms the process, the product and the producer. Planning helps the process, the product of work and the worker. Planning gives children integral training:

The pupils learn something more than the mere information they seek, they learn how to search for information, to judge and discriminate, to look ahead and plan for the future. A teacher who

trains the pupils to plan for themselves every piece of work which they have purposed to do is developing in them the valuable qualities of judgement, independence and forethought. Therefore, teachers should use every possible opportunity to train pupils to choose and judge wisely, to plan their work, follow their plan and to think to the end. These are the very qualities, needed in actual life, which the pupils acquire by practising in the class itself.[4]

Execution Stage

After completing the planning stage thoroughly and scientifically, the teacher should start with the execution stage. Generally it starts with demonstration work by the teacher as to the methods and processes of work to be done by children. This demonstration is necessary, particularly when the process of the activity and the methods of doing it, are new to children. It should be perfect in every way. It is the demonstration of work that stirs the instinct of imitation inherent in children. The teacher should not waste time demonstrating activities familiar to them. For the activity, possessing multiple and complicated processes, he should not demonstrate all the processes at one time, or ask children to complete the work at one sitting. By this method children are apt to forget the details of processes and the methods of doing, and consequently their finished products will be spoiled. For those activities, containing multiple and complicated processes, he should divide the demonstration of the whole activity into suitable units and demonstrate one process at a time as a part of the activity. It should be followed by the children, doing it, and so on. It will be demonstration work by the teacher-cum-work of the children. This will minimize the possibility of mistakes by children. The teacher should also guard against distributing raw materials and tools to the children before his demonstration as it will make them curious to know about them and play with them. Consequently, they will not pay attention to the demonstration work of the teacher. This is specially important while dealing

[4] J. T. Rajanayagam: *The Activity Programme in Indian Education*, p. 18

with little children. After the demonstration, raw materials and equipment or tools should be distributed to the children, who will start their work in right earnest. The teacher should not give them an opportunity to play with the materials but should provide a purposeful situation in which to utilize them. Outwardly the distribution of materials, either before or after the teacher's work, appears to be insignificant, but it has been observed that this mistake has often resulted in indiscipline of the class. This spoils the product of the work and the worker too. While presenting the demonstration, the teacher should be vigilant and keep his eye over the whole class to ascertain that everybody observes and understands the different steps of the demonstration, and follows them closely and attentively. After this, materials and tools should be distributed by children among themselves in an orderly manner.

Children's Work and Supervision and Guidance of the Teacher

When children are busy with their assigned work, the teacher should be keen and critical. He should guide and supervise them at work. Shortcomings practised by children while at work should be noted by the teacher. He should discuss them with children at the assessment stage, enabling them to realize how far the result of work was affected by these shortcomings. Their use of materials and method of work as well as their individual and social behaviour during the work should be noted by the teacher. He should be willing to help a child who commits a mistake which is likely to hurt the child or to affect the result of his work adversely. In such cases, it is necessary that he should give individual guidance to the child concerned. This should be done sympathetically and quietly without disturbing the others engrossed in their work. Vigilant supervision of children at work gives him educational data to assess children and their work. The teacher will find it useful to record the following points during his supervision:

(1) Whether the materials and tools were adequately, intelligently and systematically utilized by children during their work;

(2) Whether the sequence of processes was maintained;

(3) Whether the children executed the processes intelligently, peacefully, co-operatively and enthusiastically;

(4) Whether their leader discharged his duties and obligations with a sense of responsibility and whether he could obtain and maintain the co-operation of his co-workers;

(5) Whether children carried out their leader's instructions intelligently and obediently;

(6) To what extent children achieved the desired result?

(7) What were the new situations and problems that arose during the process of work and what were the reactions and attitude of children towards them?

(8) Out of the children at work, who were sincere workers, who were the shirkers and who were the pupils, feeling uncomfortable, about doing the processes of work assigned to them?

Thus, supervision enables the teacher to record the above points critically and objectively. They should be discussed at the assessment stage to improve the work and the worker for future development.

Significance of the Stage of Execution

In a selective atmosphere, purposeful and planned work is assigned to children to achieve a definite result and it is through this practical work that the teacher gets rich opportunities to assess the capacities and attainments of children. He gets practical opportunities to know about children through their work. He gains knowledge about the power of initiative, insight of work, ability of handling materials, human beings and ideas, their likes and dislikes, their capacity of adjustment, capacity of doing work as well as of exacting work from others etc.

At this stage, children express their inner life through work. The teacher should utilize it for educational purposes. Through real and purposeful work, the teacher and children come in closer contact, understand one another rightly and deeply. He can inspire and guide them with

love and sympathy. Through work, he can mould the process of their day-to-day living:

This executing of the project in a social environment and in its natural setting secures the desirable 'attitudes' in their conduct towards the other pupils. Dr. Kilpatrick says, 'I consider the possibilities of building moral character in a regime of purposeful activity, one of the strongest points in its favour and contrawise the tendency towards a selfish individualism, one of the strongest counts against our customary set task 'sit-alone-at-your desk procedure'. Moral character is primarily an affair of shared social relationships, the disposition to determine one's conduct and attitude with reference to the welfare of the group. Hence, during the execution of the project in a 'social environment' under the guidance of a skilful master the pupils would be able to practise and learn the right rules of conduct. In such a life-situation as in a project class, the pupils will have occasions of a varied nature to behave in the same manner as they would act in actual life, and when they go wrong there is the teacher who would wisely and sympathetically guide them. Thus the children are learning right conduct. Conduct is as broad as life. Life is a stream of experience through the act of learning. Life is a process of learning. Education enters life, and conduct helps life. Thus, the real aim of education, which is 'life-building', man-making, character-making, and assimilation of ideas, would be accomplished. This is really the educational climax.[5]

Recording and Assessment of Work

After finishing the work, children should be encouraged to give accounts of their work. It should indicate details of work done, materials used, methods and processes followed, the time spent for the work, the nature and type of the result achieved. It will be oral work for beginners; gradually, it will become oral as well as written work taking different literary forms. In this manner they are trained to give a clear and comprehensive record of work done in a lucid and effective way. Under the guidance of the teacher, purposeful recording trains them to take

[5] J. T. Rajanayagam: *The Activity Programme in Indian Education*, pp. 19, 20.

into account the work done, and to describe details of the work freely, fearlessly and objectively.

Suggestions regarding the Work of Recording

The recording of children should not be mechanical and stereotyped. It should manifest their individuality as well as their literary and creative abilities, expressed through various forms, such as, letter-writing, essay-writing, dialogues, charts, graphs etc. The point of emphasis is to train pupils to do work with purpose, take a correct view of the work done and to report it effectively and in an impartial manner. Recording develops the power of expression.

Assessment Work

After the execution, the teacher should enable the children to assess their work. This process of assessing trains them to compare the actual results achieved with the programme of work planned by them. They should compare the quality and quantity of the actual result along with the time, expense and human power spent in the planned programme of work. While comparing the result, the teacher should bring to their notice their shortcomings during the execution stage which he has recorded. He should explain the effects of such shortcomings on the result of their work. He should appreciate the good points of their work and encourage them for greater effort and better work for the future. He should also make constructive suggestions to overcome their weak points or the defects in their work which affected the result. This should not dishearten them but encourage them to be more careful in their future programme of work. Through the activities of the school, a teacher enables children to evaluate their own progress in the acquisition of skills, the formation of right social habits, as well as attitudes and knowledge concerning the harmonious development of their personalities.

Thus, in the organized social atmosphere of a basic school, the child gets practical training in the four important educative processes of purposing, planning, executing

and assessing their work, carried out as an educational unit. These processes make him educated, and not the mere skill attained in doing an activity or work. These processes, valuable though they are, will be truly educative only if they enable the child to see higher values beyond self and in doing so, he is not led into the present-day dangerous habit of using them for personal gain. Activity, in his case, is not only a means of acquainting himself with the world at large but it should be his duty, religion and the aim of life to learn, through it, the value of service, self-criticism, co-operation and the importance of sincerity in his dealings with his fellow-men. Herein lies the uniqueness of the technique of correlation in basic education. It does not give a child unrelated skills, habits, attitudes and knowledge for selfish purposes, but enables a child to acquire them through the creative and constructive work done in the school and which is organized on a democratic community basis. It trains him to utilize whatever is acquired for the common good. Thus, the technique of correlation has a psychological basis which respects the innate nature of the child in his education. It also respects his individuality, but as a part of, and at the service of, the community.

This technique accepts the very living of the child as the basis of his education. It enables the child to learn to live as an efficient and cultured citizen through the organized and purposeful living of the school. The technique of correlation offers 'living' of the educand for his 'learning'. "Stresss should be laid on the principles of co-operative activity, planning, accuracy, initiative and individual responsibility in learning" through creative and constructive living. Thus, it is a dynamic technique of learning for life through living. Shri Bharatan Kumarappa, while editing the volume entitled *Basic Education* which contains articles of Gandhiji regarding the new scheme of education, has rightly clarified the implications of this technique thus:

(a) That true education of the individual which is all-round development of his faculties, is best obtained through action. If

biologically, thinking develops in man only as an aid to action, as evolutionary psychologists tell us, then Gandhiji's scheme of education bases itself on the sound and indisputable fact that knowledge and understanding develop in relation to problems set by action. Information thrust on the mind apart from action is most often only by a burden on the memory and causes intellectual indigestion if nature does not come to the rescue and cast such learning into oblivion.

(b) Further, this education, if it is to draw out to the full the latent capacities of the child, has to be through a craft. For it is a craft which is capable of being manipulated by the child that sets problems to him and calls out in relation to them his thought, character and artistic sense. Under literary education, on the other hand, whatever training is given to the child is given in isolated sections. The mind is sought to be trained in a class apart from manual work, the hand and eyes in manual work apart from mind, and the heart in art and religion apart from the mind and action. But since the child is an organic unit, it is obvious that it is only such training as draws on all the faculties in a correlated manner, that can best develop a harmonious and well-balanced personality. In this age of over-specialization and compartmentalism, this plea of Gandhiji's for integration in the education of the child is timely and most valuable.[6]

Thus, the technique of correlation offers creative and constructive activities to live a richer and fuller life, organized in a selective, democratic, cultural and social atmosphere of the school and ensures the integrated development of the child as a living organ of the community. To ensure integrated learning of the educand, the units of educational practice should be organized in different stages as discussed in this chapter. These stages in planning the work are not to be followed mechanically. The giving of a few correlated lessons as a part of practice teaching work will not serve the purpose of integrated basic education. The point of emphasis is to organize the whole programme of work pertaining to day-to-day educational practice in accordance with the four important educative processes as outlined above.

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6 *Basic Education*, pp. v, vi.

CHAPTER X

CONCLUSIONS

Organization of Practice Teaching Work

Teachers should receive correct and sufficient practice in the art and science of the technique of correlation in basic education to keep it dynamic and effective. In basic training institutions trainees should have a clear and comprehensive concept of the ideological, methodological, organizational and curricular aspects of the system of basic education, to enable them to practise the technique of correlation correctly and effectively. They should be trained to realize that all these aspects are interrelated and inter-dependent. They should get adequate scope in practical training of the basic features of the scheme like craft, community living etc. before starting actual practice teaching work so that they can utilize them fully and correctly as the basis and medium of their teaching work. It should be organized, not as intermittent practice, but as continuous practice teaching-cum-observation work. Through the system of practical training in practice teaching work, trainees should get sufficient scope for observing the teaching work done by class teachers and by their co-trainees. Observation work of trainees should be well-planned, directed and supervised by the members of the staff. The day-to-day work of all grades of the practising school, attached to a basic training institution, should be well-planned and organized to make the correlated and integrated learning of children natural, systematic and effective. This planning of work also helps teachers under training to get an idea of different aspects of the system of work, through their practice of continuous teaching-cum-observation work, organized in blocks. Their continuous practice teaching-cum-observation work should be properly supervised and assessed and should be followed by a group discussion, which then becomes the basis of their pedagogic training. Continuous practice teaching work

coupled with practical pedagogic training will enable trainees to practise the technique of correlation rightly and effectively. The ideological, methodological, organizational and curricular aspects of a basic school should be frequently emphasized during their training period. Practice teaching work should give them a correct concept of all these aspects which they will practise in the day-to-day work, after training.

Suggestions regarding the Practice of the Technique of Correlation

As suggested above, teachers should have clear and comprehensive knowledge of the ideological, methodological, organizational and curricular aspects of the scheme of basic education through the well-organized training of practice teaching work given to them in the basic training institution. After training, teachers have to practise the technique of correlation in day-to-day work. To make its practice purposeful, natural and effective, the following suggestions are given:

1. Group Discussion and Planning

Teachers of all grades of a basic school should discuss together the syllabus at practice and its implications and should make yearly, monthly, and detailed weekly planning of teaching work. This work should be based on the experiences arising out of creative and constructive activities and life-situations of children. Periodical planning will make correlated learning of children purposeful, graded, systematic and effective.

2. Recording of Day-to-day Work

Teachers should keep correct and full records of day-to-day work. This will improve their periodical planning, the practice of the technique of correlation and will offer a practical basis for evolving a future syllabus of correlated studies, to be improved upon the data of these records.

3. Atmosphere Necessary to Practise the Technique of Correlation

They should be keen and careful to create and maintain the necessary atmosphere required for the successful working of the technique of correlation. Purposeful living and doing in the right type of atmosphere ensures integrated learning on the part of the pupils. Without the proper atmosphere, activities, the basic features of the scheme, like daily routine activities, craft, community life activities etc., observance of environmental occurrences etc., become mere rituals and cease to be educative agencies. The very living and doing in school life, without the proper atmosphere, is felt by the teacher and the taught to be a drudgery and results in waste. Living and doing without an educative atmosphere has no meaning. In the proper atmosphere teachers have to organize the very process of living and doing of children and should enable them to attain integrated, correlated learning. They should impart not only associated learning in the form of correlated literary teaching, but should impart integrated learning through the technique of correlation. Over-emphasis of any of the aspects of learning at the cost of the others, harms the very cause of education—the integrated and harmonious development of the child through the process of living and doing, organized by the school. For this, teachers should maintain an experimental attitude for the use of the technique of correlation.

Suggestions for Further Study

1. To evolve the art and science of the technique of correlation, it is necessary to have experimental work in regard to the curricular aspect. It represents the structural side of the scheme. Teachers of basic schools have to deal with it constantly in their day-to-day practice. Structural aspects of curricular contents and functional aspects of the technique of teaching should be of a supplementary nature to enable teachers to realize the objectives of this system of education. As such, research work should be carried out to evolve a practical and detailed scheme of

correlated studies, which will enable teachers to practise the technique of correlation naturally and successfully.

2. It has been claimed that the scheme of basic education has now passed through the experimental stage and is in the process of expansion. Under these circumstances, it is essential to evaluate, in a scientific manner, the achievements of children who have received their education on the basis of the technique of correlation practised in basic schools. This type of research work will provide data for future reference. It will inspire teachers and workers to study the factors inherent in the achievements of children, and make them the basis for improving the ideological, methodological, organizational and curricular aspects of the scheme. Such research work is necessary for the betterment of that system of education which is practised as a system of national education with the purpose of achieving harmonious and balanced development of the personality of the child who is an integral part of an ever-growing and co-operative society.

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(b) Syllabus of a Basic School prepared by the Central Government of India, by the State of Bombay and by the Saurashtra Government.

(c) Scheme of Activity Programme for Basic Schools, prepared by the Education Department of Bombay.